

## ABSTRACTS OF POSTER PRESENTATIONS



### CLINICAL ASPECTS

#### PCA 1

17-YEAR SURVEILLANCE OF 657 MB CURED CASES RETREATED BY MODIFIED MDT

Jing ZhiChun, Zhou DaoHai, Chen JiaKun, *et al.*

Shanghai Skin Disease & STD Hospital, 200435, Shanghai, China

**Objective:** To investigate the role of MDT retreating in decreasing relapse rate of cured cases with DDS monotherapy. Methods: 657 cured cases with DDS monotherapy were retreated with modified MDT for one year, had been monitored for 17 years by clinical and bacteriological aspects, and were analyzed statistically.

**Results:** 620(94.74%) of them completed course, and toxic and side-effects were slightly. There was 1 leprosy relapse patient after 14 years follow up; relapse rate was 0.21% or 0.15/1000 person-years. The relapse rate of the cases retreated was lower compared with non-retreated cases ( $P < 0.001$ ).

**Conclusion:** the retreating was more effective to reduce relapse rate of the cured with DDS monotherapy. However, the MDT retreating was recommended in high relapse rate and good economic areas due to expenses of retreating. Moreover we should not ignore later relapse by persistence.

[Key words] Leprosy; Retreat

#### PCA 2

A CASE REPORT OF II LEPROSY REACTION WHICH LEADING TO HARM INTERNAL ORGANS

Luo Liangkui

The Station for dermatosis control of Jiangxi, Chongyi County, Jiangxi, China

The female Leper, 33 years old, The BL Leprosy. She had been cured with MDT Scheme of MB Leprosy. There were II Leprosy reaction with nephritis, arthritis Scleritis and others internal organs being harmed in her body 7 months later. After taking tabellae multiglycosidorum tripterygu uilfordii and tripterygium wilfordiif prednisonum and curing comprehenly complication, we controlled and healed the complication in a short time.

[Key words] The II Leprosy reaction Nephritis Arthritis Scleritis

#### PCA 3

A CLINICAL AND EPIDEMIOLOGICAL PROFILE OF MULTIBACILLARY LEPROSY PATIENTS WITH A SINGLE SKIN LESION

Authors: Vieira, G.A.; Sales, A. M.; Duppre N.C.; Pereira, R.M.O.; Albuquerque, E.; Nery, J.A.C.; Gallo, M.E.N.

Institution: Leprosy Laboratory, Oswaldo Cruz Foundation (FIOCRUZ), Rio de Janeiro, R.J., Brazil

**Introduction:** In multibacillary leprosy, the existence of a single skin lesion, whose precise pathogenesis is still unclear, is a rare occurrence. A single skin lesion in itself is not a symptom of a more benign form of the disease. In light of the uncommon nature of this lesion, the leprosy research community welcomed the decision of WHO that all patients with a positive BI regardless of the clinical form of the disease would be considered multibacillary.

**Objective:** To determine the frequency rate of MB patients with a single skin lesion as well as trace their clinical and epidemiological profile.

**Material and Methods:** A retrospective study was carried out in the Leprosy Outpatient Clinic between 1987 - 2001 based on the clinic's databank and the patient records of the 14 MB patients who presented a single skin lesion. The patients were submitted to routine examinations at diagnosis.

**Results:** During the study, of the 1,707 patients registered in the Clinic, 14 MB patients, mostly residents of Rio de Janeiro (71.4%), (5 females and 9 males) ranging from 11 to 66 years of age, presented a single skin lesion. Patches (57.2%) were the most commonly-occurring skin lesions followed by macula (42.8%). BIs varied from 0.16% to 4%. Thirteen patients showed a negative Mitsuda test, which was positive in only one patient (7mm). The most commonly-found clinical form was borderline-lepromatous (BL) at 64.3% (9 patients).

**Conclusion:** In this study, the incidence rate of MB patients with a single skin lesion was 0.82%, which corroborates the rarity at which a single skin lesion occurs as has been reported in the literature.

#### PCA 4

A FIELD TRIAL OF DETECTION AND TREATMENT OF NERVE FUNCTION IMPAIRMENT IN LEPROSY-REPORT FROM NATIONAL POD PILET PROJECT

Juan Jiang, G.C. Zhang, and X.Y. Wei

Institute of Dermatology, Chinese Academy of Medical Sciences and Peking Union Medical College, 12 Jiangwangmiao Street, Nanjing, 210042, People's Republic of China

As part of the national pilot project on leprosy rehabilitation and prevention of disability (POD), a total of 1407 patients were monitored for possible nerve function impairment (NFI) through standardized clinical nerve function assessment between May 1995 and February 1998. Of these, 191 patients were found to have NFI and were put on a fixed regimen of prednisolone. In this study, 36.7% of NFI occurred before diagnosis of leprosy, 35.6% developed during

MDT and 25.7% after their release from MDT. Overall, 7.5% (105 out of 1407) of all patients, or 55.9% of patients with NFI, suffered from silent neuropathy. Of the affected nerves, 62.6% had silent neuropathy. Sensory impairment responded to prednisolone satisfactorily, giving a recovery rate of 73.8%, 76.5% and 81.0% in ulnar, median and posterior tibial nerve, respectively. Sensibility in patients even with a NFI duration longer than 6 months made significant improvement ( $p < 0.05$ ). Motor function improvement was less satisfactory, especially in ulnar and c. popliteal nerve. The possible reasons are analysed. Our findings with regard to sensibility changes confirm that once it becomes clinically detectable, NFI is no longer at the 'early' stage. More sensitive tests are necessary to detect real 'early' sensory impairment in the field. Our study also indicates that with well-trained field staff and proper equipment for nerve function assessment, early detection and treatment of NFI can be practical and effective.

#### PCA 5

A SPECIAL CASE - A LEPROSY PATIENT WITH 2 RELAPSES AFTER MULTIDRUG THERAPY

Dr. Dao Manh Khoa

Dermato-venereology Center of Haiphong City

Place of the subject implementation: Haiphong

Dermato-venereology Center, 50 Tran Phu, Haiphong, Vietnam

**Introduction:** After 18 years introducing multidrug therapy (MDT) Haiphong City has helped reduce the leprosy prevalence rate to 0.033/10,000 population. But the city is now facing with a great problem: resistance to MDT.

**Objective:** Patient: Pham Van Dap, born in 1957, Sex: Male

**Methodology:** Supervise and record the development of clinical aspects, tests and photos.

When there were signs of relapse, consultation was conducted with Vietnam Dermato-venereology Institute.

**Summary:** The patient was detected with BL type in 1993 and was selected as a patient for the study under the joint project between Vietnam and WHO with MDT + ofloxacin from 1993 to 1994. In 1998 he was found with the first relapse with special and rare symptoms. Thousands of small infiltrations were found scattered on the face, hands, feet, and body interwoven with reddish papules. The patient felt very itchy. Tests showed that BI rose to 4+. This time he was treated with MDT regimen MB for 24 months. After 24 months of treatment, his condition was stable clinically and in tests. But one year later the disease relapsed second time in December 2001. This time he was treated following a special regimen

combining 3 kinds of medicine ofloxacin, minocine and lamprene for two years.

**Result and comment:** The disease relapsed twice after eight years. The first relapse showed special and rare clinical symptoms: very itchy. The second relapse occurred more quickly and seriously. At present, after one month's treatment with the special regimen his condition is changing for the better. But whether it will relapse will take some time to answer. The patient is going to be treated for two years. Will there be any side-effects that might badly affect the patients health?

**Conclusion:** Patient Dap is the first case in Haiphong suffering from two relapses with special and rare symptoms. We should not be subjective with the disease relapse after MDT. It is suggested that WHO and leprosiologists continue to research so that they can work out a more perfect regimen to solve the current problem of medical resistance.

### PCA 6

ALTERED SKIN WRINKLING IN LEPROSY PATIENTS AND CONTACTS.

Ximena Illarramendi, Anna Maria Sales, José Augusto Costa Nery, Einar Wilder-Smith, Euzenir Nunes Sarno, Annelies Wilder-Smith.

Laboratório de Hanseníase, Dept. Medicina Tropical, Instituto Oswaldo Cruz

Av. Brasil 4365, Manguinhos, Rio de Janeiro, RJ, CEP.21045-900, Brazil.

There is evidence that Leprosy patients and their contacts have autonomic dysfunction, but current electrophysiological methods for autonomic assessment are expensive and require extensive training. We therefore investigated the simple bedside test of skin wrinkling as a potential test for autonomic nerve function in leprosy.

**Method:** Forty-nine leprosy patients and 13 contacts attending the Leprosy Referral Centre in Rio de Janeiro were evaluated. Following inspection, both hands were immersed in water at 40°C for 30 minutes and examined for wrinkle formation on the fingertips. A grading scale for each finger was used as follows: 0=no wrinkle, 1=discrete wrinkles, 2= one-two wrinkles/valleys and 3= three or more wrinkles. According to this scale, a normal hand would have a value of 15 points.

**Results:** Skin wrinkling in patients was more affected than in contacts (median values: patients right=7, left=8; contacts right=12, left=11). Sixty nine percent of the patients had moderate to severe alteration (0-19 points) in both hands, while 61.5% of the contacts had normal to slightly affected skin wrinkling (20-30 points). The prevalence of moderate to advanced abnormality was similar in the pa-

tients already treated (70%) and in those under MDT (67%). Advanced impaired skin wrinkling in leprosy patients was 34% and in contacts 23%. Eleven patients had absence of wrinkles in either one or both hands, and 1 contact had bilateral absence of wrinkles.

**Conclusion:** Skin wrinkling test is easy to perform and is useful in the evaluation of leprosy patients. The abnormal skin wrinkling observed in contacts confirm previous studies that found sub-clinical alterations in peripheral autonomic function of healthy contacts, the significance of which needs to be further investigated.

### PCA 7

AN ANALYSIS OF 11 MULTIBACILLARY LEPROSY RELAPSES PRESENTING TO AN OUTPATIENT REFERRAL CENTRE IN HYDERABAD, INDIA.

Rajgopal Reddy, Suman Jain, Syed Muzaffarullah, Diana NJ Lockwood\*, Sujai Suneetha.

LEPRA India - Blue Peter Research Centre, Cherlappally, Hyderabad – 501301, India

\*London School of Hygiene & Tropical Medicine, London, UK

Blue Peter Research Centre is an extension of Dhoolpet Leprosy Research Centre (DLRC) in Hyderabad which has been carrying out out-patient based management of leprosy for over 2 decades. The aim of this study was to analyse the multibacillary (MB) relapses presenting to our centres since January 2000 to December 2002. Relapse in MB leprosy was defined as the reappearance of lesions and positive skin smears after completion of a full course of treatment and a reasonably long disease/symptom free intervening period.

11 patients (M6, F5) presented as MB relapses during this period. All of them presented with appearance of new lesions/symptoms after stopping treatment with durations ranging from less than 5 years in 1 patient (3 years); 5 to 10 years in 3 patients and >10 years in 7 patients. The patients were originally classified as BT in 1 patient, BL in 3 and LL in 7.

On relapse they were classified as BL in 1 and LL in 10 patients. A histological support for the diagnosis was available in 9 patients. 1 BT patient relapsed as LL and one BL patient relapsed as BL. The remaining 2 BL patients and all the LL patients relapsed with lepromatous disease. The relapse BI was  $\leq 3+$  in 2 patients and  $> 3+$  in 9 patients.

History of past treatment revealed that 6 patients relapsed after DDS monotherapy, 3 patients relapsed after completing a full course of MB MDT, 1 patient of LL relapsed after 27 doses of Dapsone and Rifampicin (prior to availability of Lamprene) and 1 BT patient relapsed as LL after a full course on PB MDT.

### PCA 8

AN OBSERVATION ON THERAPEUTIC EFFECTS ON PLANTAR ULCERS OF 11 CURED LEPROSY CASES WITH DISABILITIES

LUO Jingwen\*, CHEN Zihong\*\*, NONG Haibo\*\*, LI Quanyue\*\*\*

\*Chongzuo Station for Prevention and Treatment of Skin Diseases, Guangxi, China

\*\*Chongzuo People Hospital, Guangxi, China

\*\*\*Liberation Army 303 Hospital, China

**Objective:** To study the causes of plantar ulcers of leprosy, as well as x-ray check, histopathological changes and treatment.

**Methods:** 11 cured cases with serious plantar ulcers were chosen to make enlarged wound operation.

**Results:** Out of 11 cases with plantar ulcers which had been treated with antibiotics for 30 days after operation, 12 ulcers in 8 cases became dry and 9 ulcers in 6 cases had little effusion. Followed up in 3 months, 4 ulcers 3 cases healed and scars appeared, 15 ulcers in 9 cases improved and 2 ulcers in 1 case were infected.

**Conclusions:** Because the nerves and blood vessels of the skin are damaged by *M. leprae*, the skin has no feeling, which results to ulcers finally. The effective therapy includes controlling the appearance of the ulcers, thorough operation, enough antibiotics, self-care and reduction of activities.

### PCA 9

ANÁLISE COMPARATIVA DE RESULTADOS HISTOPATOLÓGICOS COM DIAGNÓSTICOS CLÍNICOS EM HANSENÍASE NA URE MARCELLO CANDIA, MARITUBA, PARÁ

Carlos Alberto Vieira da Cruz\* e Claudio Guedes Salgado\*\*

\*URE "Marcello Candia", Secretaria Executiva de Saúde do Estado do Pará; End. Av. João Paulo II, 113. Bairro Dom Aristides, Marituba, Pará, Brasil. 67200-000.

\*\*Laboratório de Dermato-imunologia UEPA/MC, Universidade do Estado do Pará, e URE "Marcello Candia"

A histopatologia é um dos exames complementares utilizados no diagnóstico de hanseníase (MH). Realizamos uma análise retrospectiva comparando as hipóteses diagnósticas (HD), os resultados histopatológicos (RH) e o diagnóstico final do clínico, através da avaliação dos prontuários da URE Marcello Candia no ano de 2001. Como a histopatologia somente é realizada em caso de dúvida após testes de rotina, o número de prontuários é pequeno e o diagnóstico clínico é realmente duvidoso. De 34 pa-

cientes avaliados, 16 (47%) tiveram a forma clínica do RH compatível com a HD, enquanto 9 (26,5%) foram incompatíveis e 9 (26,5%) foram inconclusivos. Entre os incompatíveis, os resultados HD/RH foram os seguintes: I/T (4); T/D (1); V/I (1) e; D/T (3). Os RH inconclusivos tinham as seguintes HD: I (2); T (1) e D (6). Em 22 de 25 RH com forma clínica definida, o clínico manteve o diagnóstico final compatível com o RH. Nos 9 casos com RH inconclusivo manteve-se a HD inicial. Considerando a classificação operacional, dos 34 casos, 6 (17,64%) sofreram modificações após o RH, sendo que 3 mudaram de PB para MB e 3 de MB para PB. Dos 17 (50%) casos com HD de MB, apenas 5 (29,41%) tiveram RH de MB, 3 (17,64%) tiveram RH de PB e 9 (52,95%) tiveram RH inconclusivo. Os dados acima sugerem que apesar da alta incompatibilidade (26,5%) entre HD e RH na classificação de Madri, a maioria dos casos com classificação operacional em PB 14/17 (82,3%) mantiveram-se como PB, enquanto que 12 (70,58%) dos 17 casos MB diferiram da HD ou não foram conclusivos. Todos os casos relacionados aqui realizaram PQT, com melhora. Conclui-se portanto que a histopatologia pode auxiliar no diagnóstico de MH, principalmente nas formas PB, e que o contato entre o clínico e o patologista é necessário para o melhor esclarecimento dos casos com HD de MB.

### PCA 10

ANALYSIS ON NERVE IMPAIRMENT OF THE UPPERLIMB IN 8578 LEPROSY PATIENTS

Pan Liangde, He Xinguo, Kuang Yanfei, Gao Xiaoling, Di Xiaodan, and Mo Jiangling

Hunan Institute of Dermatology Venereology, Changsha, Hunan Province, 225700 China

In order to make clear the situation of nerve impairment of the upper limb in leprosy cases, we selected 8578 leprosy non-active and active cases who are still living in Hunan province as the study samples. The result showed that about 40.29% of the upper limb in all cases developed nerve impairment. The lateral nerve impairment was 23.15%. It is higher than that of bilateral nerve impairment (17.14%). The nerve impairment among active and relapsed cases was 54.03%. It is higher than that of non-active cases (19.51%). The MB cases developed more nerve impairment (50.15%) which is higher than that of PB cases (21.15%). We also find that 36.55% of the ulna nerve developed nerve impairment, the medium nerve, 16.68% and the radial nerve, 1.64%. The claw hand with the stiff fingers was seen in 73.03% of cases. The nerve impairment has relation with leprosy reaction counted for 41.06%. Most of active and relapsed leprosy cases have the single nerve impairment. The frequency of nerve impairment developed is as following, The first is in ulna nerve, The second, medium nerve and radial nerve,

Two third of nerve impairment is in reversible. The nerve impairment in upper limbs is significantly different due to delay of diagnosis of leprosy, leprosy reaction and different type of clinical leprosy

### PCA 11

#### ANALYSIS OF BLOOD SERUM CRISTALLIZATION IN LEPROSY

A.A.Juscenko, A.K.Ajupova, N.G.Urlyapova

Leprosy Research Institute, Astrakhan, Russian Federation

Peculiarities of crystalline structure of blood serum (BS) were studied in leprosy with using a new laboratory method based on wedge-shaped dehydration (V.N.Shabalin, S.N.Shatokhina, 1996). BS drop at 0.02 ml was placed on a slide surface and allowed to dry at t 18-25oC during 6-8 hours. Then samples were studied in stereomicroscope MZ 12 (firm "Leica"). In the process of drying on the open surface of BS drop a thin film ("faciens".*Lat.*) is formed. The main structural elements of the faciens include segments, separates, cracks, concretes. Microstructures of the type of Arnold's tongues, wrinkles, plates, leaf-like structures and others are considered as pathological formations We studied faciens of BS from 80 patients with lepromatous leprosy (12 patients with active leprosy and 68 with regressed leprosy) aged 35-78 years old. Faciens of BS from healthy donors aged 25-35 years served as controls. It was found out that a pattern of structure of BS in the process of its dehydration was of certain peculiarities in leprosy. Noted changes in main structures of faciens of BS as well as pathological formations depended on the severity of leprosy, presence of complications, concurrent illnesses and age of a patient. The intensity of disturbances noted reflected severity of pathological processes. All this, as well as observed in vitro effects of biological preparations (tuberculin, lepromin) on pattern of BS structure suggested a high informative value of the method of wedge-shaped dehydration for more accurate defining disease activity and differential diagnosis of specific processes.

### PCA 12

#### ANALYSIS OF DROP-FEET OF LEPROSY IN 2235 CASES

Yan Liangbin, Zhang Guocheng, Chen Xiangsheng, *et al.*

Institute of Dermatology, Chinese Academy of Medical Sciences and Peking Union Medical College, National Center for STD and Leprosy Control, Nanjing 210042

To understand situation of drop-feet cased by leprosy in order to provide scientific basis for formulation of preventive strategies. All alive cured and active lep-

rosy cases in 11 counties in Jiangsu Province were investigated. Data were entered into computer for analysis. Among investigated cases, prevalence rate of drop-feet was 15.7%, the rate in single foot (13.62%) being higher than double feet (2.07%), rate in active or relapsed cases (31.28%) being higher than cured cases (15.07%), and rate in BT and BB leprosy cases (23.56%) being 23.56% and 20.96%. Within duration of less than 5 years, prevalence rate of drop-feet in PB cases (72.41%) was higher than that in MB cases (50.47%); and the rate in cases who had leprosy reactions was 33.75%. In patients with drop-feet the prevalence rates of plantar ulcers (21.21%), bone damage (19.17%) and foot disability (27.43%) were higher than those in patients without plantar ulcers (15%), bone damage (15.09%) and foot disability (20.19%). Among 989 drop-feet, only 30% could be reconstructed with operation. Drop-feet are more common among active or relapsed cases and predominately occurred on single foot. The plantar ulcers and foot disabilities are more frequently occur in drop-feet. Two-thirds of drop-feet have not chance to be reconstructed, and 70% of cases with drop-feet have not confidence to do such reconstructive surgery. Occurrence of drop-feet is associated with delay of diagnosis and treatment, leprosy reactions and leprosy classification.

### PCA 13

#### ANALYSIS OF NEWLY DETECTED LEPROSY CASES FROM 1990-1998 IN CHINA

Li Wenzhong, Shen Jianping, Chen Xiangsheng, Jiang Cheng, Yu Meiwen, Zhu Chengbin

Institute of Dermatology, Chines Academy of Medical Sciences, Nanjing, P. R. China 210042

Since implemented multi-drug therapy on leprosy recommended by WHO, the leprosy prevalence decreased significantly in China and the world. But the annual leprosy incidence seems not to parallel with the decrease of the leprosy prevalence. The Leprosy incidence decreased slowly in the recent years in China, and sometimes showed the rebounding situation in leprosy incidence. We selected the data on leprosy newly detected cases from 1990-1998 from database of leprosy surveillance system, National Center for STD and Leprosy Control to analyze the situation and the trend of leprosy transmission in China. Hoping to get the information to establish the working priority on leprosy control.

**Materials and methods:** The data came from database of leprosy surveillance system, National Center for STD and Leprosy Control. The diagnosis, classification and skin smear test of leprosy is based on the Handbook of Leprosy Control in China. The disability grading system is based on the 7<sup>th</sup> report of WHO Leprosy Expert Committee. The population calculation in provinces is the median of every three years.

**Result:****Table 1: General information of newly detected cases from 1990-1998 in China**

Years	No. of new cases	Annual detection rate (1/100000)	Average age at diagnosis(y)	Average delay time(m)	MB Ratio(%)	No. of Relapse cases
1990	3263	0.29	36.8±15.3	40.6±78.6	59.6	428
1991	2810	0.25	36.9±15.6	37.8±74.4	61.5	323
1992	2514	0.22	36.9±15.2	34.7±52.4	63.1	318
1993	2032	0.18	37.3±15.2	31.6±48.3	64.1	247
1994	1845	0.16	37.8±15.6	31.5±42.1	66.6	194
1995	1809	0.16	37.2±15.1	31.3±44.5	65.2	200
1996	1667	0.15	37.3±15.0	31.8±45.6	67.0	178
1997	1547	0.14	37.9±15.7	32.0±47.0	67.9	283
1998	1966	0.16	36.9±15.9	30.8±43.8	63.6	175
Total	19453	0.17	37.2±15.5	34.4±57.9	63.7	2346

**Table 2: Methods of detection of leprosy cases in China**

Years	General reporting	Disease clinic	Follow up				Group survey	Others
			Skin contact	up survey	Clue survey	Spot survey		
1990	1005	1206	245	581	134	16	57	19
1991	864	1087	189	513	62	9	65	21
1992	832	827	199	493	57	2	37	17
1993	624	823	138	331	51	1	57	7
1994	550	738	163	314	29	4	40	7
1995	543	737	114	339	29	3	37	7
1996	506	634	144	295	48	3	27	10
1997	484	622	113	277	29	1	10	11
1998	520	703	210	409	51	48	17	8
Total	5928 (30.5%)	7427 (38.2%)	1515 (7.8%)	3552 (18.3%)	490 (2.5%)	87 (0.5%)	347 (1.8%)	107 (0.6%)

**Table 3: Sources of transmission in leprosy cases**

Years	No. of new cases	Sources of transmission of leprosy		
		In family	Out of family	Unknown
1990	3263	912	1283	1068
1991	2810	769	1217	824
1992	2514	758	1061	695
1993	2032	625	830	577
1994	1845	560	780	505
1995	1809	494	789	526
1996	1667	490	708	469
1997	1547	436	659	452
1998	1966	612	788	566
Total	19453	5656(29.1%)	8115(41.7%)	5682(29.2%)

**Table 4: Clinical analysis of new leprosy cases from 1990-1998 in China**

Years	No. of new cases	Child cases(%)	Cases with single lesion (%)	No. of cases with BI >4.0(%)	No. of cases with Nerve damage(%)	cases with disability Grade 2(%)
1991	2810	111(3.95)	322(11.46)	299(10.6)	2459(87.5)	738(26.3)
1992	2514	87(3.46)	279(11.10)	285(11.3)	2201(87.5)	657(26.1)
1993	2032	52(4.04)	231(11.37)	254(12.5)	1744(85.8)	463(22.8)
1994	1845	65(3.52)	191(10.35)	212(11.5)	1621(87.9)	430(23.3)
1995	1809	68(3.76)	185(10.23)	215(11.9)	1546(85.5)	420(23.2)
1996	1667	65(3.89)	189(11.33)	186(11.2)	1416(84.9)	351(21.1)
1997	1547	63(4.07)	179(11.57)	197(12.7)	1304(84.3)	330(21.3)
1998	1966	114(5.80)	244(12.41)	202(10.3)	1678(85.4)	398(20.2)
Total	19453	781(4.0)	2161(11.1)	2208(11.4)	16871(86.7)	4672(24.0)

**Table 5: Comparison on new cases of leprosy from 1996-1998 in some province of China**

Provinces	Population (millions)	No. of new cases diagnosis (y)	Average age at time (m)	Average delay cases (%)	No. of child disability	No. of Grade 2 positivity	(%) No. of BI
Yunnan, Guizhou, Sichuan, Jiangsu, Shandong, zhenjiang, Xinjiang, Gansu, Qinhai	187.06	2874	35.6	31.5	149(5.2)	623(21.7)	1826(63.6)
	202.27	423	45.1	29.5	5(1.2)	115(27.2)	300(70.9)
	46.17	169	29.0	29.4	33(19.5)	35(20.7)	82(48.5)

**Discussion and conclusion**

The leprosy prevalence in 1998 decreased by 74% than 1990 in China, and showed a continually declining trend, but the detection rate of leprosy in the recent 5 years decreased not significantly, and fluctuated between 0.14~0.16/100000. Based on theory that if all leprosy cases treated with MDT in time, leprosy transmission could be decreased, and the detection rate of leprosy declined. Our study showed that the detection rate did not decreased significantly. It may be related with many leprosy cases who were not detected in time, and as the leprosy transmission sources existed a long time. Incidence

The results showed that the average age of new leprosy cases at diagnosis from 1990-1998 is 37 years old, the average delay time of new cases at diagnosis is 34.4 months and the child leprosy cases counted for 4% of all cases. It indicated that although the leprosy control has achieved a great success in the past years in China, the leprosy problem could not be neglected in some provinces.

There were 5656 cases developed leprosy due to contacting the active cases within the family which counted for 29.1% of all cases. About 8115 (41.7%) cases developed leprosy due to contacting the active cases out of the family. There were a total of 13771 (70.8%) cases who had the definite sources of leprosy. The result showed that it is of great importance to us in following up the contacts of leprosy.

The 95% of all new cases were detected by the methods of skin clinic, disease reporting, clue survey and follow up contacts. About 13355 leprosy new cases were detected by the passive methods (Skin clinic and disease reporting) which counted for 68.7% of all cases. But 5991 cases (counted for 30.8%) were detected by the active case-finding methods (Clue survey, spot survey, group survey and so on). It suggested that active cases finding with passive methods should be recommended.

Among 19453 cases, about 12228 cases were skin smear positive that counted for 62.9% of all cases. About 2208 cases were BI more than 4.0 which counted for 11.4% of all cases. The skin smear test is also of great importance to diagnosis and treatment of leprosy in the field. Now above the level of county in China, almost every leprosy unit has established the reliable skin smear laboratory. We suggest that the skin smear test should be maintained in the leprosy control program.

There were only 2161 cases with the single lesion which counted for 11.1% of all cases from 1990-1998 in China. We agree with WHO's review that some operational factors in the field could influence the specificity of diagnosis on leprosy such as rewarding on reporting of leprosy and political pressure. We consider that the leprosy cases with the single lesion must be diagnosed with caution and must be avoid to over-diagnosis on leprosy.

The result showed that among the 19453 cases, 86.7% of cases had nerve damage. The cases with the disability grade 2 counted for 24% of all cases. This is much higher than that of 32 leprosy epidemic countries (5.43%~9.63%) in the world from 1985~1997 reported by WHO. We think that there is a problem in leprosy early cases finding due to the traffic difficulty and lack of leprosy service in the mountain areas.

### PCA 14

#### ANALYSIS ON 93 RELAPSED LEPROSY CASES

Fu Zhizhi, Liang Jianxiu, Huang Peiyong

Guangxi Institute of Dermatology, 530003, Nanning, China

**Objective:** to provide guidance for leprosy control at the grass-roots level through studying the relapse situation of leprosy in Guangxi Autonomous Region during recent years. **Methods:** the relapse situation was analyzed by Chinese statistical software of leprosy.

**Results:** Out of 93 relapsed cases detected during 1990 to 2000, 82 cases relapsed after DDS monotherapy (88.17%) and 11 cases after MDT (11.83%). The mean duration from cure to relapse and after MDT to relapse was respectively 15.62 years and 8.27 years. The proportion of new case to relapsed case was 1.09:1. Most cases were detected in dermatology clinic and some others by follow-up visit and self-report.

**Conclusions:** There is a relapse in different degree after both DDS monotherapy and MDT, which indicate that in a low epidemic situation, to detect relapsed cases in time should be regarded as one of the most important tasks.

[**key words**] leprosy, relapse, MDT

### PCA 15

#### ANALYSIS ON DETECTION OF NEW LEPROSY CASES BEFORE, DURING AND AFTER THE YEAR OF LEPROSY ELIMINATION CAMPAIGNS

Shen Jianping, Li Wenzhong, Yu Meiwen, Yang Jun, Zhou Longchao, Wang Rongmao, Hu Lufang, Mou Hongjiang, Ye Fuchang, He Xinguo, Pan Liangde,

Institute of Dermatology, Chinese Academy of Medical Sciences, 12 Jiangwangmiao Road, Nanjing, P. R. China 210042

In order to analyze the impact on the situation of case finding after Leprosy Elimination Campaigns, the data of newly detected leprosy cases in the leprosy high endemic area have been collected before, during and after the year of carrying out Leprosy Elimination Campaigns. The result showed that the number of new leprosy cases detected during the year of lep-

rosy elimination campaigns was significantly high. The number of newly detected cases after the year of Leprosy Elimination Campaigns was similar to that of detected before the year of carrying out Leprosy Elimination Campaigns in counties with persisting case finding activities. But the number of newly detected cases after the year of Leprosy Elimination Campaigns significantly decreased in counties without active case finding activities. The average distance from the house of leprosy cases detected during Leprosy Elimination Campaigns to the leprosy control unit at the county town is 62.8 kilometer which is farther more than that of other leprosy cases detected before and after the year of Leprosy Elimination Campaigns. The average disease delay-time of leprosy cases detected after the year of LEC shortened. The results also showed that carrying out Leprosy Elimination Campaigns will have no the significant impact on the trend of cases finding within a short time in local areas. But it may improve some indicators of leprosy patients and so promote the leprosy control in local areas.

### PCA 16

#### ANALYSIS ON NERVE IMPAIRMENT OF THE UPPER LIMB IN 641 LEPROSY PATIENTS

Pan Shu, Pan Xiao-feng, Liu Tong-kui

Xinghua Station of Skin Diseases Control, 225700, Xinghua, Jiangsu Province, China

In order to make clear the situation of nerve impairment of the upper limb in leprosy cases, we selected 1575 leprosy non-active and active cases who are still living in Xinghua city as the study samples. The result showed that about 40.7% of the upper limb in all cases developed nerve impairment. The lateral nerve impairment was 23.1%. It is higher than that of bilateral nerve impairment (17.52%). The nerve impairment among active and relapsed cases was 69.23%. It is higher than that of non-active cases (40.46%). The MB cases developed more nerve impairment (55.94%) which is higher than that of PB cases (38.46%). We also find that 36.63% of the ulna nerve developed nerve impairment, the medium nerve, 16.95% and the radial nerve, 2.35%. The claw hand with the stiff fingers was seen in 73.03% of cases. The nerve impairment has relation with leprosy reaction counted for 43.37%. Most of active and relapsed leprosy cases have the single nerve impairment. The frequency of nerve impairment developed is as following, the first is in ulna nerve, the second, medium nerve and radial nerve, Two third of nerve impairment is irreversible. The nerve impairment in upper limbs is significantly different due to delay of diagnosis of leprosy, leprosy reaction and different type of clinical leprosy.

[**Key words**] leprosy; nerve of upper limbs; impairment

### PCA 17

ANATOMICAL AND CLINICAL STUDY OF THE SUPERFICIAL BRANCH OF RADIAL NERVE – A CONTRIBUTION FOR THE DIAGNOSIS OF LEPROSY.

Rosemari Baccarelli, João A.C. Navarro, Diltor V.A. Opromolla, Marcos C.L. Virmond; Somei Ura

Instituto Lauro Souza Lima, CP 3031, Bauru - SP - Brasil, CEP 17034 - 971

The purpose of this paper is to contribute to the diagnosis of leprosy and to evaluate the possibility of a misdiagnosis based on superficial branch of radial nerve (SBRN) palpation and its anatomical relationships. A clinical study was conducted based on the results obtained by three leprologists. Each examiner performed SBRN palpation at the radius dorsal tubercle level on a total of 70 upper extremities of 25 Hansen's disease patients and 10 healthy controls. All test subjects were adult males. The data collected regarding the SBRN thickness, consistency and shape were statistically analyzed to evaluate agreement using Kappa statistics and association through chi-square test. Macro and microscopic observations of the anatomical relationships of the thickest branch of the SBRN with surrounding tendons and veins, at the radius dorsal tubercle level, were also performed. A total of 20 formalin (10%) preserved adult male human cadavers upper extremities were studied macroscopically and 22 upper extremities of 10% formalin preserved adult male human cadavers, microscopically. Results indicated that palpation of SBRN is subject to considerable inter-observer variation. Chi-square results show a statistically significant association between SBRN thickness and clinical group, as well as of SBRN thickness and consistency. Anatomical aspects of SRBN demonstrated some findings that can lead to erroneous clinical assessment of its thickness, consistency and surface. Difficulties in evaluating the SBRN by palpation and the anatomical variations observed suggest caution when interpreting results, and that inclusion of this nerve during routine field work neurological evaluations be considered with reservations.

### PCA 18

APPROACHES TO IDENTIFICATION OF RISK GROUPS FOR LEPROSY NEURITIS

E.S.Balybin

Leprosy Research Institute, Astrakhan, Russian Federation

Searches for criteria to consider a patient as having risk of development of leprosy neuritis are of urgency. In the work presented we discussed the main scientific developments in this direction and our own

attempts aimed at elucidation of pathogenesis of leprosy neuritis and estimation of prognostic value of the data obtained as well. The most part of investigations unravel the most significant aspects of mechanism of peripheral nerve damage in leprosy (molecular, ultrastructural and cell-cooperative neurotropism of *M. leprae*). But application of the data obtained for prognostic aims is unlikely. In this regard, methods of detection of antineural antibodies (anAb) seem to be more promising. At the same time data obtained by various investigators are rather contradictory. One might suggest that some part of free anAbs in blood serum is not caught because they seem to be bound with immune complexes and directly with antigens of peripheral nerves. According to our observations, intersystem approach to prognosis of development of leprosy neuritis is promising. It is based on simultaneous evaluation of intensity of proliferation of leprosin-stimulated lymphocytes and state of cortisol-producing function of adrenal cortex.

### PCA 19

ASSOCIAÇÃO DE HANSENÍASE NEURAL PURA E CONTRATURA DE DUPUYTREN: RELATO DE CASO.

Souza, G.M; Manze, CJS; Goulart, IMB; Sales, MAG; Pereira, JE.

Centro de Referência Estadual em Hanseníase/Dermatologia Sanitária, Faculdade de Medicina, Universidade Federal de Uberlândia. Av. Pará, 1720 – Bloco 2H, CEP38400-902 – Uberlândia – MG, Brasil.: [imb@ufu.br](mailto:imb@ufu.br).

**Introdução:** A neurite do nervo ulnar é a forma mais comum de neuropatia hansênica. Clinicamente apresenta-se com dor, espessamento do nervo ulnar, atrofia de musculatura interóssea e região hipotenar e garra do 4º e 5º dedos, enquanto que a “Contratura de Dupuytren” consiste numa fibrose da fáscia palmar com retração de pele e flexão da articulação metacarpofalangeana e/ou interfalangeana proximal, porém sem acometimento neurológico.

**Relato de caso:** Paciente masculino, 47 anos, foi encaminhado ao nosso serviço por apresentar quadro de dor intensa em trajeto de ulnar direito, com irradiação para 4º e 5º dedos da mão, com garra dos respectivos dedos, atrofia discreta de musculatura interóssea e espessamento do nervo ulnar ao nível do cotovelo, sendo diagnosticado Hanseníase Tuberculóide (TT) Neural Pura e iniciado terapêutica com poliquimioterapia paucibacilar (PB) e Prednisona 60mg/dia. Na reavaliação após 30 dias, o paciente apresentava melhora do quadro algico e do espessamento do nervo ulnar. Nesta ocasião, foi evidenciada uma retração da pele na face palmar da mão direita sobre a região dos tendões flexores do 4º dedo, sendo feito o diagnóstico clínico de “Contratura de

Dupuytren” e o paciente encaminhado para tratamento cirúrgico com liberação da fásia palmar e decompressão com transposição do nervo ulnar.

**Conclusão:** Este caso ilustra a importância de um exame físico minucioso para confirmar a ocorrência de duas patologias, que podem ser consideradas como diagnósticos diferenciais em um mesmo paciente, podendo levar a fatores de confusão na confirmação do diagnóstico de formas neurais puras de hanseníase

### PCA 20

#### AVALIAÇÃO DA NEURITE HANSÊNICA ATRAVÉS DA ULTRA-SONOGRAFIA

Erika Suenaga, Renato Sernik, Leontina C. Margarido, Giovanni Guido Cerri.

Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo.

Rua Dr. Enéas de Carvalho Aguiar, 250, São Paulo – SP.

O estudo ultra-sonográfico permite uma avaliação estrutural dos nervos periféricos, possibilitando o acompanhamento da neurite hanseniana.

Foram avaliados sistematicamente os nervos radial, mediano, ulnar, fibular comum e tibial bilateral de pacientes em diferentes estágios da doença, utilizando-se o aparelho Logic 700, GE, com transdutor linear com frequência de 9-13 MHz. Os aspectos ecográficos avaliados incluíam: espessura do nervo, padrão fascicular, extensão do acometimento neural, compressão por túneis osteofibrosos e estudo da vascularização intraneural através do Doppler colorido.

Verificou-se que pacientes de hanseníase apresentam maior espessura dos nervos periféricos, os quais, de acordo com o tempo de doença, podiam se apresentar com perda do padrão fascicular normal.

Conjuntamente aos aspectos clínicos e à eletroneuromiografia, o ultra-som adiciona informações sobre os aspectos estruturais dos nervos periféricos e desta forma permite uma análise confirmatória do acometimento neural, do grau e da extensão do comprometimento, além de poder auxiliar no acompanhamento da eficácia terapêutica reacional, através da comparação desses dados, e do uso do Doppler colorido, durante ou após o tratamento.

### PCA 21

#### AVALIAÇÃO DO ACOMETIMENTO UNGUEAL NA HANSENIASE

Carla Wanderley Gayoso; Mohamed A. Azouz; Francisca Estrêla Maroja Dantas; M<sup>a</sup> das Graças Videres A. Almeida; Francimary de Sousa Buriti.

Instituição:UFPB/Hospital Universitário Lauro Wanderley

Avaliamos meticulosamente as unhas das mãos e dos pés de 60 doentes portadores de hanseníase. Os doentes foram avaliados no ambulatório da UFPB e em clínica privada no decorrer de 2000 e 2001. De um modo geral, a faixa etária mais acometida foi a de 31-60 anos. Foram avaliados um total de 60 doentes com hanseníase, onde observamos que 24 pacientes eram portadores de alterações ungueais. Destes, 20,83% estavam na faixa etária de 11-30 anos, 54,17% tinham de 31-60 anos e 25% tinham mais de 60 anos.

### PCA 22

#### AVALIAÇÃO DO COMPORTAMENTO CLÍNICO DOS HANSENIANOS NO INSTITUTO LAURO DE SOUZA LIMA NO PERÍODO DE 1930 A 1990.

Noêmi Garcia de Almeida Galan, Edson Eiji Nakayama, Vitor Soares.

Instituto Lauro de Souza Lima (ILSL) – Bauru – SP-Brasil.

Foram estudados retrospectivamente 1984 pacientes portadores de hanseníase falecidos no ILSL no período de 1930 a 1990. Os resultados dos dados clínicos e laboratoriais foram expressos em média  $\pm$  erro padrão quando paramétricos, em mediana e percentil quando não paramétricos. A comparação foi realizada utilizando-se ANOVA ou teste “t”; Kruskal-Wallis e teste do  $\chi^2$ . As curvas de sobrevivência actuarial foram determinadas através do método de Kaplan Meyer, e comparadas pelo “log rank test”.

**Resultados:** Houve predomínio do sexo masculino e raça branca, não sendo observada diferença estatisticamente importante ( $p > 0,05$ ) entre as décadas. A idade média dos pacientes no período do diagnóstico da Hanseníase (MH) foi  $39,75 \pm 0,36$  anos, sem diferença entre as décadas ( $p > 0,05$ ). A idade média do óbito foi de  $52,02 \pm 0,36$  anos; observando-se um aumento significativo das décadas de 40 ( $46,36 \pm 0,61$  anos) para 50 ( $52,54 \pm 0,95$  anos) ( $p < 0,001$ ), de 50 ( $52,54 \pm 0,95$  anos) para 60 ( $57,15 \pm 0,74$  anos) ( $p < 0,01$ ) e de 70 ( $58,59 \pm 0,75$  anos) para 80 ( $64,83 \pm 1,19$  anos) ( $p < 0,01$ ). A mediana de uréia foi 63,5 mg/dl (P25 = 36 mg/dl; P75 = 140 mg/dl) e de creatinina 2,17 mg/dl (P25 = 1,47 mg/dl; P75 = 6,05 mg/dl). As principais causas de óbito foram: doenças infecciosas (48,50%); doenças renais (24,50%); cardiovasculares (17,50%); neoplásicas (4,30%); digestivas (3,20%); respiratórias (0,60%) seguida de outras causas (1,50%). A sobrevivência actuarial da hanseníase foi: na década de 30 de 5 anos; na de 40, 7 anos; na de 50, 10 anos; na de 60, 16 anos; e nas décadas de 70 e 80/90 foram 20 anos. Estatisticamente observou-se aumento na sobrevivência actuarial nas décadas subjacentes ( $P < 0,05$ ).

**Conclusões:** O aumento da sobrevivência actuarial das respectivas décadas coincidiu com a implantação de

um tratamento eficaz e diagnóstico precoce, enquanto que as complicações renais decresceu significativamente

### PCA 23

#### BACTERIOLOGICAL STATUS OF LEPROSY AFFECTED BEGGARS AND ITS EPIDEMIOLOGICAL SIGNIFICANCE

Suman Jain, Rajgopal Reddy, Shaik Yousuf Jani, Sujai Suneetha

LEPRA India - Blue Peter Research Centre, Cherlappally, Hyderabad - 501301

A recent publication has indicated that about 20 percent of leprosy affected beggars were smear positive and may be a hidden source of infection to the community. The aim of this study was to estimate the bacteriological status of leprosy affected beggars at our centre in order to assess the epidemiological significance for the spread of infection.

We used 2 approaches - one, we screened all leprosy affected beggars who attend our centre and second, we identified 3 leprosy colonies where such beggars reside and carried out a clinical and bacteriological assessment on site. Slit skin smears were taken from a minimum of three sites (Right earlobe, Left forehead, Left arm) and sometimes from the skin lesions.

A total of 127 beggars were screened (M 70, F 57). The duration of disease ranged from 5 to >40 years. 102 of them had deformity of hands and or feet. 45 patients gave a history of taking Dapsone Monotherapy for durations ranging from 5 years to 10 years. 44 patients had completed MDT. In 38 patients a clear history of past treatment could not be ascertained, but most of them said they had taken treatment at different leprosy centres.

Slit skin smear examination revealed 4 cases that were positive out of the 127 tested (3.1%). The average BI ranged from 0.5 to 5.4 with the individual site BI ranging from 1+ to 6+. A detailed analysis of these 4 patients revealed that they had either taken only monotherapy and had relapsed or had taken treatment irregularly.

This study help allay the fears in the general public to the possibility of "Catching the disease" through casual exposure to leprosy affects beggars in society

### PCA 24

#### BORDERLINE LEPROMATOUS LEPROSY IN A PATIENT TREATED WITH INFlixIMAB (A TUMOR NECROSIS FACTOR INHIBITOR)

M. Patricia Joyce and David M. Scollard, National Hansen's Disease Programs, 1770 Physicians Park Drive, Baton Rouge, LA, 70816, USA.

Chimeric monoclonal antibodies directed against tumor necrosis factor alpha (TNF) have been developed for use in rheumatologic conditions. Agents such as infliximab and etanercept interfere with T-lymphocyte functions and have been associated with reactivation of infections controlled by cell-mediated immunity. Active tuberculosis has been reported in persons receiving infliximab recently, raising concern for the need for prophylaxis to treat latent disease.

We report the first case of leprosy in a person receiving infliximab. A 60-year-old man with a five-year history of rheumatoid arthritis developed a skin rash. He had previously been treated with methotrexate, hydroxychloroquine, and steroids without relief. One month following his first infliximab injection, he developed skin lesions that worsened following his second injection. Infliximab was discontinued. Biopsy of the lesions showed BL leprosy with skin smears positive to 3+ with globi. Normal skin was present in the dermis between the affected areas. He has received standard MDT, with good results and no signs of reaction to date. His arthritis remains in control with only nonsteroidal medications.

Screening for latent infections should be considered for patients receiving immunosuppressive drugs. Use of TNF inhibitors has been associated with the activation of latent mycobacterial infections, tuberculosis and now the first case of leprosy

### PCA 25

#### CHALLENGES OF IMPLEMENTING A SKIN TEST TRIAL FOR LEPROSY UNDER PRESENT DAY CIRCUMSTANCES

Becky L. Rivoire, Stephen M. TerLouw, Paul W. Roche, Murdo Macdonald and Patrick J. Brennan.

Department of Microbiology, Colorado State University, Fort Collins, Colorado 80523, U.S.A.

Anandaban Leprosy Hospital, The Leprosy Mission, P.O. Box 151, Kathmandu, Nepal

The elaborate and multifaceted process of testing two new leprosy skin test antigens (MLSA-LAM and MLCwA) in clinical studies began in 1992. The quest for regulatory approval from the FDA and other authorities has heightened our awareness of the stringent regulations in the U.S. and abroad for research on humans. Familiarization with regulatory requirements, resources, training in human research, document creation and approval processes was integrally critical to manufacturing antigens in a GLP/GMP pilot facility and running a Phase I clinical study at CSU. Each element was addressed and skin test antigens were manufactured in May, 1997. Concurrently, working in concert with our NIAID, NIH Project Officer, our Human Research Committee (HRC) and Phase I Principal Investigator, FDA

approval for the Investigational New Drug (IND) application and Phase I clinical study was approved in December 1998. The Phase I trial was successfully completed in December 1999. Preparations for the Phase II clinical trial were greater in magnitude. Foremost was the identification of the trial site (Anandaban Leprosy Hospital, Kathmandu, Nepal)(see related abstract). In addition, approvals from CSU HRC, Nepal Health Research Council (NHRC) and the Office for Human Research Protection (OHRP) were required before study documents could be submitted. The Phase II protocol and consent forms were extensively reviewed before approval. Comparably, standard operating procedures, study guidelines and case report forms have been created in Nepal, reviewed and approved. Finally, and most importantly, a safety monitoring committee was established to oversee the study as it progresses. Although challenges of implementing a skin test trial have been intense and difficult, with teamwork and perseverance the process is nearing final approval. The Phase II study is expected to begin in March 2002.

### PCA 26

#### CHARACTERISTICS OF PATIENTS WITH HANSEN'S DISEASE SEEN AT A PRIVATE MEDICAL CENTER IN HAWAII, 1998 AND 1999

Nina M. Teruya, M.S., Richard I. Frankel, M.D., M.P.H., and Ronson J. Sato, B.A.

The Queen's Medical Center and the University of Hawaii John A. Burns School of Medicine, 1356 Lusitana Street, #724, Honolulu, Hawaii.

Hansen's disease has occurred in Hawaii since the 1830's. Since 1984, all medical care for Hansen's disease has been provided in the private sector. We reviewed the charts of all 37 patients who were seen at The Queen's Medical Center in 1998 and 1999 in whom Hansen's disease was listed as a diagnosis.

The mean age was 59 years, with 35% being younger than 50 years. 78% were male. 30% were Hawaiian, 24% Filipino, 14% Samoan, and 14% Micronesian. In 30%, the record stated that the patient had lived or still lived at Kalaupapa.

Aside from Hansen's disease, the 2 most common primary diagnoses were gastrointestinal disease, and infection. 76% of the visits/admissions were for problems other than Hansen's disease.

The Ridley-Jopling classification was included in only 38% of cases. 14% had LL disease, 8% BL/BB, 5% BL, 5% BB and 5% BT. 35% were known to be receiving antimicrobial therapy for Hansen's disease, and 45% of those receiving therapy were receiving more than one drug for Hansen's disease.

18 patients were stated to have comorbidity. 6 had foot ulcer, and 5 each had hand deformity, foot deformity, and neuropathy.

We will discuss the significance of these findings in relationship to the epidemiology of Hansen's disease in Hawaii.

### PCA 27

#### CLINICAL AND EPIDEMIOLOGICAL EVALUATION OF PATIENTS WITH HANSEN'S AGED BETWEEN 0 TO 14 YEARS.

Chaves, M.S.R.; Araújo, P.L.M.; Sailaja, K.S.; Ingrid; Nery, J.A.C.; Azulay, R..D.

Department of Leprosy, Instituto de Dermatologia da Santa Casa da Misericórdia, Rio de Janeiro, Brazil.

**Introduction:** Hansen's was considered as a hereditary disease in the past. Since it was thought because of higher incidence in infancy. In Brazil 10% of the cases were detected in children. In relation with clinical aspects, the infantile Hansen's has got same characteristics like in adult Hansen's with some peculiarities.

**Material and Methods:** In this study 219 patients were included from January 1998 to December 2000 at the Out patient department of Dermatology (hygiene) of Santa Casa. On analyzing the patient records 16 patients (7%) were between the 0 to 14 years age. These patients were classified as per the Madrid classification (1953) and lab exams were performed. After confirming the diagnosis multiple drug regime was started where as 2 patients (12.5%) were managed conservatively.

**Results:** Out of 219 patients registered, 16 patients (14%) were children between 0 to 14 years age group, out of this 15 were males and 1 was a female. 14 patients (87.5%) had paucibacillary type. On evaluation of the relation between the diagnosis and duration of the disease we observed 7 (44%) patients were diagnosed within 6 months of the beginning of the symptoms. The Basciloscope was negative in 15 (94%) patients. In one patient reaction (reverse reaction) was noted. In relation with the treatment 11 patients (69%) treated with PTQ/PB, 1 patient treated (6%) with ROM, 2 patients (12.5%) treated with PTQ/MB.

**Conclusion:** This study in relation to age with clinical type showed that paucibacillary type is more common than the multibacillary type, but later does exist.

### PCA 28

#### CLINICAL ANALYSIS OF 111 LEPROSY PATIENTS WITH TYPE 1 LEPROSY REACTION

Hu Lufang, Luo Jiushi, Jian Daming, Ning Yong, Wu Xincheng

Sichuan Institute of Dermatology, 12Sidao Street, Chengdu, 610031, China

To investigate the incidence, clinical features and management of type 1 reaction (RR) in the leprosy patients treated with WHO-MDT regimen.

**Methods:** To analyze the incidence, relation with classification, clinical features, occurrence and persistence of RR in 111 patients with RR.

**Results:** Among 2004 leprosy patients treated with MDT, 111 cases are diagnosed to have RR (5.54%) and 73.83% of them are borderline patients (BT, BB and BL). Of 111 patients with RR, there are 4 cases with skin lesions (3.60%), 93 cases with skin lesions and nerve impairment (83.78%) and 14 with nerve impairment (12.61%). 102 patients are diagnosed to have RR before and during MDT (91.89%), including 58 cases occurred in the first year of MDT (52.25%), and 69 cases with RR persisted for 6 months (62.16%). **Conclusion:** Among leprosy patients treated with MDT, the incidence of Type I reaction is 5.54%, most cases are the borderline patients occurred in the first year of MDT. Type I reaction causes nerve impairment and persists for long time. Sufficient doses and course of steroid therapy can prevent and decrease occurrence of deformity.

[**Key words**] Multidrug therapy Type I reaction

### PCA 29

#### CLINICAL AND DIAGNOSTIC ASPECTS OF THE PURE NEURAL VARIETY OF LEPROSY

José A Garbino, Andrea F F Belone, Lúcia H S C Marciano, Raul N Fleury

Instituto Lauro de Souza Lima, CP 3021, Bauru – SP, CEP 17034-971

**Aim of investigation:** Contribution to the knowledge of pure neural variety of leprosy, the diagnostic approach.

**Methods:** A total of 25 patients with peripheral neuropathy suspicious of leprosy, without detectable skin lesion or positive skin bacilloscopy were studied during the period of 1994-01. They were submitted to dermatological and neurological examination, sensory mapping, electrophysiologic tests, Mitsuda reaction and biopsy of the sural nerve. The histological studies were applied with hematoxiline-eosine, Fite-Faraco and imunohistochemical study with polyclonal antibodies ant-BCG antigen.

**Results:** The age range was from nine to 87 years old, 20 of them were male and five female, in 72% of patients the symptoms developed above the fourth decade. The clinical picture of polineuropathy occurred in 80% of the patients while 20% were mononeuropathy multiplex. The Mitsuda reaction was possible to read in 20 patients, being positive in 15 and negative in five. The histological routine examination, hematoxiline-eosine and Fite-Faraco, was conclusive for leprosy in seven patients. Five of them were borderline or tuberculoid and two were bor-

derleine lepromatous, accomplished 28% of confirmed diagnosis cases.

The imunohistochemical study was introduced in order to increase the diagnosis and help to discharge this hypothesis. The test was positive in nine patients; all of them previously confirmed leprosy, one with inespecific inflammatory process and another arteriopathy (36%). Among the remaining 16 patients, two patients had leprosy confirmed and in 14 it was excluded in the follow-up, pulling the diagnosis to 44%.

**Conclusion:** The imunohistochemical study is an accurate instrument to be added to the routine histological examination of the peripheral nerve in the suspicious cases of leprosy, but the clinical follow-up also has an important role in this investigation.

### PCA 30

#### CLINICAL EVALUATION OF INFANTILE NODULAR HANSEN'S (INH).

Baraúna, S.; Barcelos, D.L.; Mendonça I.P.T.; Orofino, R.R.; Abreu, F.; Nery, J.A.C.; Azulay, R. D.

Department of Leprosy, Institute of Dermatology, Santa Casa de Misericórdia, Rio de Janeiro, Brazil.

**Introduction:** The Infantile Nodular Hansen's (INH) is a variety of Tuberculoid Hansen's. Clinically it can present in various types. The lesions are usually few but yet times multiple. Lesions are commonly noticed in the exposed areas but they heal spontaneously.

**Material and Method:** Out of 103 patients evaluated at the out patient department of Dermatology (hygiene), 8 patients (8%) had fulfilled all the criteria of clinical and epidemiological features of Infantile Nodular Hansen's (INH). The variables of sex, age, number and location of lesions, mode of contact and type of treatment were correlated. The treatment was given according to the Brazilian national program of Hansen's control. (PQT/PB & ROM).

**Results:** Out of 103 patients registered, 8 patients (8%) had INH type and out of this only one male patient (12.5%) and 7 patients (87.5%) were females. The average age is 6.5 years. As per the study of number of lesions 4 patients (50%) had only one lesion and one patient (12.5%) had more than 10 lesions. Face is very often affected i.e. in 6 patients (75%). 3 patients had this by the way of domestic contact. In relation with the treatment 3 patients (37.5%) were treated as per the scheme of PQT/PB, 1 (12.5%) with ROM and 4 (50%) with conservative treatment.

**Conclusion:** All though INH had been stated many times in the literature as a single lesion seen on exposed areas, the interesting point noted in this study

is that we found one case with disseminated lesions. In the major group of patients the mode of contact could not be identified well.

### PCA 31

COMPARISON BETWEEN ML OF TISSUE FLUID SMEAR AND THAT OF PATHOLOGIC SECTION BEFORE AND AFTER MDT ON MB LEPROSY PATIENTS

Cun-Xin HE, Xiao-Ying WANG, Xiu-Lian ZHANG

Hanzhong Sanatorium, 723000, Hanzhong, Shanxi Province, China

The article has made a comparison between ML of skin tissue fluid and that of tissue pathologic section on 142 new patients of MB leprosy. Those patients have finalized the process of MDT, undergone continual monitor, and met the treating requirement. This article aims to discuss the change of bacteria of these two inspecting means on different steps of MDT.

The 142 cases have proved to be positive on the bacteriological inspection before MDT. The averages of BI and BIG are 3.55 and 3.27 respectively, much close to each other. But under MDT, those two figures decrease sharply. ML of tissue fluid decreases far greater than that of pathologic section. The difference is obvious ( $P < 0.001$ ). BI and BIG have dropped to 0.0953 and 0.7404 at the end of MDT. ML of tissue fluid has transformed into negative after 42 months, while that of pathologic section into negative after 54 months. The result shows the decreasing rate of link ratio for BI is irregular. Big decrease regularly. Thus it can be concluded that ML of pathologic section is more exact than that of tissue fluid smear. BIG can represent the bacteriological change of leprosy even more accurately and objectively. It can also make a more reliable inspection to judge the treatment and to prevent the leprosy recrudescence.

### PCA 32

COMPROMETIMENTO DA MUCOSA ORAL EM PACIENTES VIRCHOVIANOS TRATADOS COM PQT E ROM

Marcelo Araújo Opromolla; Somei Ura; Diltor Vladimir Araújo Opromolla

Instituto Lauro de Souza Lima

Na forma virchoviana, desde o seu início há disseminação hematogênica do *M. leprae* que se localiza na pele, mucosas, nervos, ossos e vários órgãos. As mucosas nasal, da boca e da laringe são geralmente comprometidas e isso faz com que as vias aéreas superiores constituam uma via de eliminação dos bacilos muito importante. Pacientes com lesões específicas bem evidentes nas mucosas, em particular na

mucosa oral, são menos frequentes hoje, em que o diagnóstico é feito em uma fase não muito avançada. Contudo, as lesões específicas, embora não aparentes, devem continuar existindo. Qualquer solução de continuidade nesse nível poderia eliminar uma quantidade muito grande de bacilos que contribuiriam para a disseminação da doença. Neste trabalho foi estudada a mucosa oral de dez pacientes virchovianos em tratamento com PQT e com baciloscopia positiva. Em todos eles foi realizada uma biópsia do palato mole que é o local mais frequentemente acometido pela doença e o resultado foi o encontro do infiltrado específico e a presença de bacilos álcool-ácido resistentes nesses pacientes.

### PCA 33

CONCURRENT LEPROSY AND HIV INFECTION – SHORT TERM OBSERVATIONS - TWO CASE REPORTS

V V Pai, H.O. Bulchand and R. Ganapati

Bombay Leprosy Project, Sion-Chunabhathi, Mumbai – 400 022, India

The coexistence of mycobacterial diseases including tuberculosis and HIV infection is a well-known fact. However, there is no conclusive evidence to show any significant correlation between HIV and Leprosy. We report two case reports on the progress on the coexistence of HIV infection

Case 1: DS, unmarried, male, 22 years

Promiscuous individual. Past history of genital ulcer disease Diagnosed as BT leprosy (B.I. negative). Treated with ROM - 3 doses intermittently from September to December 1997. Developed Type - I reaction in April 1998, treated with corticosteroids. HIV confirmed by Western Blot in March 1999. LEP-ROMIN negative in September 2000 Silent neuritis in right ulnar nerve, treated with steroids. Leprosy lesions regressed completely in July 2001.

Case 2: BN, married, male, 32 years

Promiscuous and alcoholic individual. Past history of genital ulcer disease. Diagnosed as BL leprosy (B.I. was 2+) in October 2000 and treated with ROM – 12 intermittent doses till September 2001. Reported HIV (ELISA) positive in December 2000. Developed Type – 1 reaction in January 2001 and treated with steroids. Developed Herpes Zoster in March 2001 and hepatitis in April 2001. Repeated reaction in August 2001 with acute neuritis, treated with steroids. In December 2001, he was hospitalized for ulcer care. Patient expired (Suspected due to Pulmonary Kochs) in January 2002. Spouse tested HIV positive. HIV status of 2 children is unknown.

It is observed that in both these cases, though the follow up is short, clinically they have been regressing well. Long-term follow-up is necessary to observe the behaviour of clinical pattern (Case – 1), however it

seems that it may not be feasible due to mortality on account of opportunistic infection as seen in case - 2.

### PCA 34

#### DEVELOPMENT OF A SCALE TO MEASURE THE SEVERITY OF REACTION IN LEPROSY

Alison Anderson, Himalaya Sigdel, Friedbert Herm, Jukka Knuuttila, Rachel Hawksworth, Wim van Brakel, Sharon Marlowe

Green Pastures Hospital & Rehabilitation Centre, INF-RELEASE, PO BOX 28, Pokhara, Nepal

Reaction is a common complication of leprosy. It is associated with a variety of signs and symptoms, including skin signs, systemic effects such as fever, and peripheral neuropathy. Reaction differs in its severity, from mild reaction with minimal effects to severe reaction that may lead to irreversible tissue damage. Each of the signs and symptoms are associated with their own clinical test and grading method. There is however, no single, validated assessment drawing together this information. For programme, treatment, and research outcome evaluation, a single quantifiable scale measuring the severity of reaction was desired. For the purposes of the INFIR 2 project, (pilot clinical trials to evaluate alternative drugs as treatment for leprosy reactions), it was decided that a scale was needed to identify patients with severe reaction for recruitment and as a numerical way of monitoring drug response.

Scale development and validation was carried out at Green Pastures Hospital & Rehabilitation Centre. Items for the draft scale and potential gradings were collected through consultation with a team of experts from within Nepal and abroad, and by review of a cohort of patients from the hospital to identify presenting characteristics. The items were rationalised into dermatological, systemic and neurological features and include all available tests and clinical examinations. A four-point response scale was chosen. The scale was developed by classical scale development techniques, validated in the hospital against a clinical assessment made by a team of experienced physicians and will be psychometrically tested. Results of the scale development and validation process will be presented.

### PCA 35

#### DIAGNÓSTICO DA HANSENIASE: O EXAME CLÍNICO ASSOCIADO A BACILOSCOPIA PARA UMA TERAPEUTICA ADEQUADA.

Alexsandro C. Dias; Iara Pessoa Sant'ana; Vera Re-jane. do Nascimento Gregório

Universidade de Pernambuco - UPE

Centro Integrado de Saúde Amaury de Medeiros-CISAM

Rua, Visconde de Mamanguape s/n, Encruzilhada

Fone:3427-3911 Ramal-259

Recife-PE; CEP: 52030-010

A hanseníase, é uma patologia infecciosa que afeta principalmente a pele, os nervos periféricos, tem causado medo a humanidade por muitos anos. Porém O *Mycobacterium leprae*, descoberto na Noruega por Armauer Hansen em 1873, foi a primeira bactéria a ser identificada como causadora de uma doença humana. Hoje os pacientes são tratados em ambulatórios, e necessitam de um diagnóstico adequado (exame clínico e baciloscópico). O objetivo do estudo é avaliar a importância do exame clínico associado ao exame baciloscópico (BAAR) para o diagnóstico e classificação da hanseníase. Estudo transversal e retrospectivo, que utilizou dados secundários retirados dos prontuários dos pacientes matriculados no Centro Integrado de Saúde Amaury de Medeiros – CISAM-UPE referência no diagnóstico e tratamento da hanseníase na cidade do Recife-PE, no período de janeiro a dezembro de 2000 e revelaram a importância da realização do exame baciloscópico em pacientes com hanseníase, devido a sua relevância para o diagnóstico e controle da evolução da doença, é como parâmetro indispensável no auxílio da conduta a ser instituída nas reações e recidivas.

### PCA 36

#### DIFICULDADE DIAGNOSTICA NA LESÃO GRANULOMATOSA DA FACE NA CRIANÇA

Abulafia-Azulay, Luna.; Azulay, R.D.; Sodr , C.T.; Leal, F.R.P.C.; Nery, J.A.C.

Instituto de Dermatologia da Santa Casa de Misericórdia do Rio de Janeiro, RJ., Brasil

**Introdução:** A hanseníase é uma doença infecto-contagiosa causada pelo *Mycobacterium leprae* com alta prevalência em nosso país. Exterioriza-se de diversas maneiras clínicas comprometendo diversas faixas etárias. Nas crianças existe uma peculiaridade conhecida como hanseníase nodular infantil que se acredita ser bastante freqüente.

**Objetivo:** Chamar a atenção para as lesões na face em crianças.

**Material e Métodos:** TVB, sexo feminino, quatro anos, branca, natural e residente no Rio de Janeiro. Referindo lesão na face há 06 meses, foi submetida ao exame dermatoneurológico e exames complementares (Biopsia, mitsuda e baciloscopia) finalizando diagnóstico de hanseníase tuberculoides (hanseníase nodular infantil).

**Resultados:** Exame dermatológico: Lesão papulo-

tuberosa de coloração levemente ocre, menor que 1cm, localizada na asa nasal direita e sulco nasogeniano esboçando bordas policíclicas com discreta depressão central. Biópsia (granuloma tuberculóide). Mitsuda 4 mm. Teste de sensibilidade sem alteração.

**Conclusão:** Incluir este tipo de lesão clinicamente como diagnóstico diferencial de hanseníase mesmo sem história epidemiológica, devido a variedade de apresentações clínicas da hanseníase nodular infantil que pode se apresentar como nódulo, papula ou macula.

### PCA 37

#### DOENÇA AUTO-AGRESSIVA HANSÊNICA

Alexandre Lima de Barros, Bruno Eduardo Pedrosa Balbo, Maria Alice Ribeiro Ozório, Marina Lemos Carvalho, Roberta Leste Motta, Rosana Barbosa Silva, Rozana Castorina da Silva, Sílvia Helena Lyon de Moura, Sandra Lyon.

Fundação Hospitalar do Estado de Minas Gerais, Hospital Eduardo de Menezes, Centro Colaborador de Referência em Dermatologia Sanitária.

Av. Doutor Cristiano Rezende 2213, Bonsucesso, Belo Horizonte, MG

A doença auto-regressiva hanseniana, descrita em 1978 pelo Prof. Azulay, corresponde a quadro clínico e imunopatológico de auto-agressão que ocorre na Hanseníase da forma Virchowiana e, menos frequentemente, na forma difusa que tende para o pólo virchowiano devido à grande quantidade de múltiplos anticorpos às custas de uma estimulação de linfócitos B. Os autores apresentam o caso de um paciente, sexo feminino, 68 anos de idade, com diagnóstico de artrite reumatóide em julho/98, usando Diclofenaco de Sódio 20mg, Prednisona 5mg, Disofato de Cloroquina 250mg, sem melhora clínica. História de ter iniciado com quadro de lesões em placas eitêmato-hipocrônicas disseminadas no corpo, dores articulares e queda do estado geral dois anos antes do diagnóstico. Em Dezembro/98, teve o diagnóstico de hanseníase Virchowiana IB=5,2. A sintomatologia só teve melhora com o início da poliquioterapia. Ao exame dermatoneurológico apresentava perfurante plantar no Hálux direito. Os exames complementares realizados em 12/04/99 mostraram: Fator reumatóide muito aumentado: 2560 UI (<5); Proteína C Reativa: 198mg/dl (<5); VHS 60 min: 18. Os exames realizados em 08/06/2000 mostraram: Células LE: negativo; FAN: positivo; VHS 60 min: 14; Fator Reumatóide: 1280 UI (Ref.: < 25 UI/ml); Proteína C Reativa: 48 mg/LL; VDRL: não reativo; ASTO: 80,0; Urina Rotina: normal. O tratamento instituído foi a poliquimioterapia multibacilar e Talidomida 400 mg/dia com melhora completa da sintomatologia.

**Motivo da apresentação:** Alertar para a existência da doença auto-agressiva hanseniana em país endêmico e muitas vezes confundida com outras doenças auto-imunes

### PCA 38

DORMANT LEPRO BACILLI IN THE OCULAR TISSUE IN PRE MDT DAPSONE ERA AND POST MDT ERA.

Swapan K. Samanta, I.S. Roy, Jyotirmoy Biswas,

B.S.Medical College, Bankura, West Bengal, PIN 722101, and Shankar Nethralaya, Chennai, India

The Lepa Bacilli was searched in the iris tissue of the leprosy sufferers who was declared Released From Treatment (RFT). The aim of this study was to evaluate the status of bacillary clearance from the body as well as to correlate/postulate the presence of the bacilli as one of the causes/sources of relapses or the evolution of the ocular complications. Two such studies were undertaken in Eastern India in between 1979 to 1981 and in the year 2000. This iris tissue or the other ocular tissue was collected from the leprosy patients (RFT) during cataract surgery where an iridectomy was performed routinely as a part of the surgery or enucleation was done to remove a painful blind eye.

Dormant Lepa Bacilli was found to be present in the iris tissue in the Dapsone Era (1982) amongst the MB leprosy sufferers with a Negative Skin Smear report for the Acid Fast Lepa Bacilli. Again Dormant Lepa Bacilli had been encountered along the Optic Nerve sheath in "RFT" MB patient in the MDT era (2001). The histopathological picture of the skin tissue of these patients had not revealed any Lepa Bacilli. So the big question lies in the fact of the presence of these bacilli in a dormant state and the bactericidal efficacy of MDT. Is it one of the risk factor for relapse.

### PCA 39

ERITEMA NODOSO NECROTIZANTE- RELATO DE CASO.

Andréia Castanheiro da C. Barbosa; Lúcia Mioko Ito; Rodrigo Sestito Proto; Ferruccio Fernando Dall'Áglio.

Departamento de Dermatologia da Faculdade de Medicina do ABC.

Av Príncipe de Gales, 821- -09060-650-Santo André – SP- Brasil.

**Relato do caso:** Os autores relatam um caso de hanseníase dimorfo virchowiana em paciente adolescente, masculino, branco, 15 anos, natural do Ceará e procedente de Mauá, com início do quadro há 1 ano. Realizado o diagnóstico e instituída a terapia multibacilar específica, evoluiu com vários episódios reacionais do tipo II (eritema nodoso), controlados parcialmente com talidomida e prednisona, porém apresentando neurites intensas que culminaram com formação de garra fixa de nervo ulnar bilateralmente. Há 30 dias, apresentou novo surto reacional de nódulo

los eritematosos em membros superiores e inferiores, encimados por bolhas hemorrágicas e necrose central, que após tratamento específico evoluiu com cicatrizes atróficas.

**Discussão:** O eritema nodoso é uma reação de hipersensibilidade tipo III de Coombs, que ocorre em pacientes DV e V, virgens de tratamento, mas em geral durante e após terapêutica (mais comum após os primeiros seis meses de tratamento). Caracteriza-se clinicamente por nódulos eritematosos, dolorosos que eventualmente podem ulcerar e necrosar. Os sintomas constitucionais são importantes. Sugerindo uma relação mais provável com a presença de bacilos fragmentados que surgem após tratamento específico, a reação localiza-se em vasos mais calibrosos da derme profunda e tecido celular subcutâneo, primariamente nos granulomas. Os principais diagnósticos diferenciais são: fenômeno de Lúcio, síndrome do anticorpo antifosfolípide e eritema polimorfo. Apesar do diagnóstico e tratamento precoce, incapacidades graves podem se desenvolver.

**Motivo da apresentação:** Raridade e exuberância do caso.

### PCA 40

ERYTHEMA NODOSUM LEPROSUM (ENL) POSSIBLY TRIGGERED BY LEVOFLOXACIN 3 YEARS AFTER COMPLETION OF MULTIDRUG THERAPY (MDT)

Nishioka, S.A., Goulart, I.M.B.

Centro de Referência Estadual em Hanseníase/Dermatologia Sanitária, Faculdade de Medicina, Universidade Federal de Uberlândia. Av. Pará 1720, 38400-902 Uberlândia, MG, Brazil. Fax: +55-34-3218 2349. snishioka@umarama.ufu.br

**Background:** ENL, commonly found in multibacillary leprosy patients, can occur after exposure to drugs that are active against *Mycobacterium leprae*. It is known that viable, dormant bacilli (persists) can survive for many years after leprosy therapy.

**Case Report:** A 57-year-old male treated for BL leprosy with MDT for 2 years, required treatment of ENL and neuritis with thalidomide and/or prednisone for additional 20 months and was then lost to follow-up for 12 months. In November 2001, while self-medicated with daily 20-mg prednisone and free of ENL-related manifestations for 1 year, he developed cryptococcal meningitis that was successfully treated with amphotericin B (2110 mg over 2 months); prednisone was withdrawn. Each daily dose of amphotericin B was administered with 25 mg hydrocortisone as co-medication to prevent infusion-related side effects (a common practice in Brazilian hospitals). In January 12, 2002, the patient developed sinusitis that was treated with a daily 500-mg dose of levofloxacin. In January 28, 16 days after the introduction of hydrocortisone, he developed an episode of ENL.

**Discussion:** It is possible that ENL was triggered by levofloxacin, which is the active isomer contained in ofloxacin, a fluoroquinolone that is active against *M. leprae*. If this is so, it is an evidence that the patient still had viable bacilli after taking BDT for the recommended 24 months. Withdrawal of steroid is an alternative explanation that is debatable given the low dose schedule used by the patient for over 2 months before the episode of ENL.

### PCA 41

ESTUDO CLÍNICO-PATOLÓGICO DE 461 NOVOS CASOS DE HANSENÍASE

Dra. Greicianne Ferreira Nakamura; Dr. Antônio Schettini; Dra. Maria das Graças Cunha

Fundação "Alfredo da Matta". Avenida Codajás nº 25, Cachoeirinha CEP 69065-130, Manaus-Amazonas-Brasil

Apesar de nos últimos anos estar ocorrendo um importante declínio da Hanseníase como endemia em todo o mundo, a persistência de níveis elevados de casos novos em áreas geográficas pontuais e a necessidade de se manter os profissionais com experiência no diagnóstico e tratamento da doença mobilizados nos programas de controle, tem estimulado a realização de estudos no âmbito da clínica e epidemiologia. O Brasil permanece sendo o segundo país do mundo com maior número de pacientes e o Estado do Amazonas ainda apresenta taxas de prevalência e de detecção de casos novos consideradas com representativas de alta endemicidade. No presente estudo os autores fazem uma revisão de prontuários de pacientes atendidos na Fundação "Alfredo da Matta" (FUAM), que é Centro de Referência para tratamento da Hanseníase e faz o diagnóstico e tratamento de 70% dos casos da cidade de Manaus, demonstrando os dados demográficos, epidemiológicos e clínicos observados. O perfil clínico-patológico e epidemiológico deste grupo de pacientes é comparado com os descritos na literatura científica mundial.

### PCA 42

ESTUDO DA EVOLUÇÃO DAS FORMAS CLÍNICAS DA HANSENÍASE E TENDÊNCIA CRESCENTE PARA A FORMA DIMORFA, NO CENTRO DE REFERÊNCIA DONA LIBANIA – FORTALEZA CEARÁ – 1995 – 2001

Oliveira, Z. R.; Tavares, C. M.; Lopes, M. N. B.; Santos, M. F.; Pereira, E. M. S. F.;

Rua Pedro Primeiro, Centro, Fortaleza- CE

Ao analisar a evolução das formas clínicas da Hanseníase e a tendência das formas dimorfas no Centro de Referência Dona Libânia Fort. Ce, no

período de 1995 – 2001, percebe-se no cotidiano desta unidade de saúde uma tendência crescente no diagnóstico na forma tuberculóide, porém, observa-se na clínica que está havendo um aumento do número de casos de hanseníase na forma dimorfa e um comportamento diferente da doença para as formas multibacilares, especificamente a dimorfa com altos índices baciloscópicos. O objetivo deste trabalho é estudar a tendência da forma dimorfa entre todas as formas clínicas da hanseníase, verificar o índice baciloscópio da forma clínica dimorfa no momento do diagnóstico. Os dados parciais foram obtidos através das fichas de notificação e investigação dos pacientes de hanseníase e processadas no SINAN / EPINFO. Será realizado um estudo retrospectivo, descritivo e analítico de uma série histórica de casos de hanseníase nos últimos 7 anos. A casuística é constituída de todos os casos notificados do período (1995 - 2001). Analisando os dados do período de 1995 a 2001, acharam-se os seguintes resultados: a partir do ano de 1995, observa-se um aumento de casos dimorfos de 133 em relação ao total de 614 casos com o aumento de 22% no primeiro ano avaliado (1995). No último ano avaliado (2001) encontramos 433 casos na forma dimorfo entre 840 de todos os casos, alcançando um percentual de 55%. O período analisando 1995 a 2001, inclui marcos importantes na evolução da endemia hanseníase e do enfoque das políticas de controle da hanseníase, melhoria no diagnóstico clínico. Conclui-se portanto, que é de grande importância a realização deste trabalho para um maior conhecimento do comportamento desta endemia no nosso estado.

### PCA 43

ESTUDO DA VALIDADE DA CLASSIFICAÇÃO CLÍNICA DE HANSENÍASE RECOMENDADA PELO MINISTÉRIO DA SAÚDE DO BRASIL

Iara Lacerda Ferreira Crippa; Antônio Pedro Mendes Schettini; Silmara Navarro Peninni; Paula Fracineti Rebello; Maria da Conceição Schettini

Fundação Alfredo da Matta (FUAM). AV. Codajás, 25. Cachoeirinha. 69065-130. Manaus. Amazonas. Brasil.

A classificação dos pacientes de hanseníase baseada no resultado do exame baciloscópio da linfa é fundamental para a determinação do esquema terapêutico adequado. Pacientes que apresentam baciloscopia positiva serão tratados com o esquema de poliquimioterapia multibacilar e os que apresentam baciloscopia negativa recebem o esquema paucibacilar. No entanto, para os locais que não dispõem da baciloscopia, o Ministério da Saúde do Brasil recomenda que seja feita uma classificação baseada no número de lesões: até cinco lesões de pele e/ou um tronco nervoso acometido, é considerado paucibacilar e mais de cinco lesões de pele e/ou compro-

metimento de mais de um tronco nervoso é considerado hanseníase multibacilar. Neste estudo, os autores comparam a classificação clínica baseada no número de lesões e troncos nervosos acometidos com o resultado da baciloscopia e da pesquisa de bacilos ao exame histológico, em um grupo de 530 pacientes portadores de hanseníase, diagnosticados na FUAM, no período de janeiro de 2000 a março de 2001.

### PCA 44

ESTUDO DE CASOS CLÍNICOS: DIFICULDADES ENCONTRADAS NA CONDUÇÃO DO TRATAMENTO DAS REAÇÕES HANSENÍCAS

Fernanda da Silva Alves Costa; Juliana Maria Vicente; Roberto Cláudio Correia; Rosemary Aparecida Passador Sanches De Giuli

Secretaria Municipal de Saúde de Vilhena – RO

Secretaria Municipal de Saúde de Pimenta Bueno-RO

**Introdução:** A Hanseníase é sabidamente endêmica no estado de Rondônia, constituindo um sério problema de saúde pública apesar de esforços da Coordenação Estadual, priorizando programações específicas desde 1992, objetivando detecção precoce de casos e conseqüentemente a prevenção de incapacidades.

**Objetivos:** Apresentar e discutir casos de hanseníase, com pontos em comum, sob os aspectos psicossocial e clínico, em dois Municípios do Estado, Pimenta Bueno e Vilhena, identificando falhas na condução dos mesmos e buscando uma reflexão embasada na realidade local, visando assegurar uma assistência adequada aos portadores deste estigmatizante mal.

**Materiais e Métodos:** Estudo de dois casos clínicos ocorridos em diferentes Municípios. O trabalho tem como fonte, dados coletados dos prontuários dos pacientes e entrevistas.

**Apresentação dos Casos-** Pacientes jovens, mesma faixa etária e classe social, portadores da doença na forma multibacilar que apresentaram estados reacionais intensos (Eritema Nodoso Necrotizante) aliado à intercorrências clínicas adversas, exigindo terapêutica agressiva sem resposta satisfatória.

**Resultados:** A experiência foi importante para reflexão de alguns pontos básicos:

-necessidade urgente de Referência Técnica Descentralizada (Pimenta Bueno dista 510 Km e Vilhena 700 Km da capital Porto Velho);

-revisão e complementação do Manual de Normas do Programa de Controle da Hanseníase, prevendo situações adversas não tão raras como mostra a casuística.

**Conclusão:** Faz-se necessário realizações de reuniões com o intuito de promover discussões técnicas, estudo de casos e troca de informações entre as equipes municipais e/ou estaduais, o que contribuirá

também para revisão das Normas Técnicas do Programa, além de tornar as equipes coesas e seguras

### PCA 45

#### ESTUDO DO COMPROMETIMENTO NEURAL EM HANSENÍASE

Elisete S. Pedrazzani, Mariangela Pedroso Pioto, Isabella G. Oliveira, Ingrid G. Vanella, Edna S. Uati

Secretaria Municipal de Saúde de São Carlos. R. Cap. Adão P. S. Cabral, 457- São Carlos/SP. Brasil.

Os problemas das neurites, do dano neural e das incapacidades na hanseníase continuam sendo relevantes no que se refere à sua detecção precoce, ao seu tratamento e às suas repercussões psicossociais para o indivíduo e para a sociedade.

Foi realizado um estudo prospectivo com todos os casos inscritos no programa de controle e eliminação da hanseníase no período de 01 de janeiro de 1998 a 31 de dezembro de 2001 no município de São Carlos, São Paulo, Brasil. Foram monitorados 30 pacientes, sendo 17 multi e 13 paucibacilares, mensalmente ou quinzenalmente, quando necessário, quanto à evolução do comprometimento neural durante a fase de tratamento e posteriormente à sua alta clínica trimestralmente durante 2 a 3 anos. As ações básicas de prevenção de incapacidades foram parte integrante deste trabalho para a totalidade dos pacientes acompanhados.

Os resultados mostraram que:

O Nervo Tibial seguido pelo Nervo Ulnar foram os nervos mais freqüentemente comprometidos;

A maioria apresentou pelo menos um tronco nervoso em estágio de envolvimento neural no momento do diagnóstico;

82,3% evoluíram para perda da sensibilidade protetora plantar dos pés durante e/ou no período pós-alta.;

A maioria apresenta, neste momento, Estágio I de comprometimento neural, ou seja, perda sensorial incompleta para um ou mais troncos nervosos;

A detecção precoce do dano neural e o monitoramento sistematizado e periódico da função neural foram fundamentais para evidenciar e tratar os nervos acometidos;

Nenhum paciente evoluiu para perda sensorial e motora completas bem como para deformidades instaladas.

### PCA 46

#### EVALUATION OF LEPROSY PATIENTS PRESENTING LIVER ALTERATIONS DUE TO LEPROSY MDT/WHO TREATMENT

Costa, M.D.; Macedo, A.K.; Hosken, F.C.; Rosa, T.F.L.; Sales, A.M.; Nery, J.A.C.; Gallo, M.E.N.

Leprosy Laboratory / IOC – FIOCRUZ – Rio de Janeiro – Brazil.

**Introduction:** The Fiocruz Leprosy Laboratory (Collaborating Center of the Ministry of Health for the Program of Leprosy Control), among the several activities developed, one of them is to serve as a back-up to patients from other institutions coming to present side effects due to MDT.

**Objective:** Calling attention to some clinical indications which may wrongly ascribed to MDT.

**Material and Methods:** There have been evaluated 6 (six) patients with MDT. Treatment, clinically suspected of medicative hepatitis (discomfort, jaundice, abdominal pain and laboratory alterations), during the period of March to May 2001. At the moment of consultation, patients were examined by the general practitioners in charge of the service and laboratory exams (complete hemogram, liver function tests, lipid profile and serology for A, B, C viruses of hepatitis) were performed. Not having been found unfavourable laboratory results in the subsequent consultations, drugs have been introduced again in different moments, been always followed by laboratory and clinical evaluation. All the laboratory exams have been done at the Evandro Chagas Hospital (CPqHEC).

**Results:** Among six patients having been studied, two of them were male and four female. The ages range from six to seventy years old. Five patients presented normal laboratory results and only one patient presented symptomatology compatible to medicative liver disease and developed into anaemia when dapsone was introduced. Patients who did not present laboratory and clinical alterations after reintroduction of drugs have been oriented towards maintaining their MDT. Original schemes, in relation to the patient who had been unable to continue with the medication (Dapsone), the alternative scheme have been introduced (Clofazimine 100mg/day), based on the orientation of the Ministry of Health.

**Conclusion:** With the MDT. Introduction is general consensus that this one is quite safe and effective, although it demands a greater consideration on the part of its handling by health professionals.

### PCA 47

#### EVALUATION OF THE FREQUENCY OF THE REACTINAL STATES AMONG PAUCIBACILLARY LEPROSY PATIENTS.

Duarte, S.K.; Nery, J.A.C.; Machado, A.M.; Lyra, M.R.; Sales A.M.; Pinto, J.M.N.; Gallo, M.E.N.

**Introduction:** Investigative works about the frequency of leprosy reactional states have been showing varying results among the pauci and multibacil-

lary groups. In Brazil, publications on these date are still rare, mainly in the paucibacillary group.

**Objective:** The main objective of this study was to analyze the frequency of reactional states in paucibacillary leprosy patients.

**Methods:** We studied 300 paucibacillary leprosy patients, classified according to Ridley and Jopling, including the pure neuritic clinical form, with a methodical assessment of this group. The reference time was the start of specific paucibacillary treatment (WHO) and we didactically classified the reactions in three clinical types, reversal reaction without neuritis (R1), reversal reaction with neuritis (R2) and isolated neuritis (R3).

**Results:** The results demonstrated that the reactional states happen in 14,6% of patients and the recurrence was 4,5% of paucibacillary patients. It was verified that 70,4% of patients developed reversal reaction before the start of specific treatment, 25% during the treatment and 4,6% after the treatment. Reversal reaction without neuritis was observed in 56,8% of patients. "Borderline"-Tuberculoid" clinical form has the most incidence of reversal reactions (84,1%).

**Conclusion:** We have presented herein data that reinforce previous studies, showing that reaction episodes in paucibacillary patients occur less frequently than reaction episodes.

### PCA 48

EVOLUÇÃO DA HANSENÍASE NA FORMA INDETERMINADA PARA A FORMA TUBERCULÓIDE APÓS O TRATAMENTO – RELATO DE 2 CASOS.

Ana Regina Alencar Santos, Clarisse Zaitz, Juliana Rogério Prado, Clarice Marie Kobata

Foram observados 2 casos de pacientes que se apresentaram inicialmente com máculas hipocrômicas na pele e alteração de sensibilidade local, tendo sido diagnosticados e tratados como Hanseníase na forma paucibacilar, com esquema poliquimioterápico (rifampicina e dapsona) por 6 meses. Evoluíram num curto período de tempo com viragem da reação intradérmica de Mitsuda, sendo revelado no exame anatomo-patológico a formação de um granuloma, caracterizando a forma tuberculóide da doença.

**Caso 1:** paciente C. S., 55 anos, masculino, branco, natural de Arcalva – SP, procurou nosso ambulatório há 2 anos com queixa de lesões bolhosas e perda da sensibilidade no 2º quirodáctilo da mão direita, apresentando previamente síndrome do túnel do carpo nesta mão, tratada com cirurgia há 1 ano. Feita hipótese de Hanseníase forma neural, realizado eletromiografia sem alterações, baciloscopia e Mitsuda negativos, e orientado tratamento em posto de saúde com poliquimioterapia paucibacilar (rifampicina e dap-

sona). Evoluiu com surgimento de lesões em braços e pé direito, com perda de sensibilidade, onde foi realizado biópsia, revelando Hanseníase tuberculóide.

**Caso 2:** paciente S. D. A., 23 anos, masculino, branco, natural de São Paulo, procurou nosso ambulatório com lesão em perna direita caracterizada por mácula hipocrômica, área de alopecia e perda de sensibilidade térmica, dolorosa e tátil no local. Realizado biópsia revelando processo inflamatório crônico cutâneo, Mitsuda e baciloscopia negativos, prova da pilocarpina alterada, enquadrando-se o caso numa Hanseníase indeterminada e iniciando o esquema poliquimioterápico paucibacilar por 6 meses. Evoluiu no pós-tratamento com infiltração da lesão pré-existente e aparecimento de lesão nodular em lábio inferior. Realizado biópsia que evidenciou processo granulomatoso.

### PCA 49

EVOLUTION TIME PRIOR TO DIAGNOSIS AND DISABILITIES AT THE INITIAL EXAM IN MULTIBACILLARY LEPROSY PATIENTS.

Pimentel, Maria Inês Fernandes; Nery, José Augusto da Costa; Borges, Esther; Gonçalves, Rosângela Rolo; Sarmo, Euzenir Nunes.

Laboratório de Hanseníase, Fundação Oswaldo Cruz. Avenida Brasil no. 4365 – Manguinhos – Rio de Janeiro – RJ CEP: 21045 – 900.

In an effort to determine the influence of the evolution period prior to diagnosis in the presence of disabilities detected at the initial examination of multibacillary leprosy patients, one hundred patients (18% BB, 47% BL and 35% LL) were asked in anamnesis to ascertain the evolution period of the disease before the diagnosis was made. The patients were evaluated in respect to physical disabilities at the time of the diagnosis through the disability grade before treatment (DGBT), using voluntary muscle test (VMT) and nylon-monofilament sensitivity test (Semmes-Weinstein test).

The diagnosis was made up to 6 months of evolution of the disease in 29% of the patients, while more than 2/3 of them (71%) had diagnosis in a time period of over 6 months of evolution. In relation to the disabilities presented at diagnosis, 44% presented DGBT = 0; 33% presented DGBT = 1; 22% presented DGBT = 2; and 1% presented DGBT = 3. When the period of time of disease evolution before diagnosis was correlated with DGBT, we obtained a significant correlation ( $p = 0.019428$ ). Patients with bigger evolution periods before diagnosis presented bigger disability grades before treatment, while patients whose diagnosis was made up to 6 months of disease evolution presented less disabilities related to leprosy. These data show the importance of early diagnosis in the prevention of disabilities related to leprosy.

### PCA 50

#### EXPLORACIÓN NEUROLÓGICA COMPLETA EN PACIENTES CLÍNICA Y BACTERIOLÓGICAMENTE INACTIVOS DESDE HACE MÁS DE 10 AÑOS

Dr. José Ramón Gómez Echevarría (Sanatorio Fontilles); Fátima Moll Cervera (Sanatorio Fontilles)

Sanatorio San Francisco de Borja. C.P. 03791 FONTILLES (ALICANTE); sanatorio@fontilles.org

Aunque para el diagnóstico de la enfermedad no sea necesario una exploración neurológica completa, intentamos recoger los resultados de esta exploración realizada a 81 pacientes inactivos controlados por el Sanatorio san Francisco de Borja (Fontilles). Se evalúa tanto la sensibilidad superficial (térmica, dolorosa y táctil) como la sensibilidad profunda en miembros superiores e inferiores. Se valora la fuerza muscular de los Sistemas neuromusculares más comúnmente afectados. Se exploran los reflejos osteotendinosos y cutáneos y se estudian las alteraciones tróficas secundarias a la enfermedad.

Con el estudio se demuestra que, a pesar de ser posterior a la afectación de la sensibilidad superficial, también la profunda se ve afectada tras años de evolución de la enfermedad.

### PCA 51

#### EYE IN MDT- LONGITUDINAL FOLLOW-UP 1982-2002

Muthiah Arokia Rajan.

Sacred Heart Leprosy Centre, Karaikal Road, Sakkottai - 612 401, Kumbakonam, Tamil Nadu-India.

Regular Eye Examinations were done from start of treatment till last date of attendance. 1033 were followed for a minimum period of 5 years to 20 years.

Follow-up period and cases:

5 - 10 years 308

11- 15 years 449

>15 years 276

They consisted of Tuberculoid 83, Borderline 384, Borderline Lepromatous and Lepromatous 566. The treatment was according to WHO regimen. In Tuberculoid and Borderline patients 441 had no eye complication while 26 patients had Lagophthalmos only. In BL-LL patients 507 had no eye complication while 59 had eye complications.

In those with short duration of disease eye complications subsided within a year and did not recur again. In those with long duration of disease eye complications lasted for years and even in those who did not have eye complications initially developed them

later after years of MDT. Blindness occurred in 4 patients who had severe pre-existing eye complications. Steroid Cataract was common. Cataract and IOL surgery outcome was good.

Early detection of the disease and MDT prevent eye complications. All BL-LL patients need routine Slit Lamp examination for early detection of Iritis. Early detection of Reversal Reaction will prevent Lagophthalmos. Treatment of ENL with Thalidomide will reduce Steroid Cataract. Benefits of ophthalmic surgery including IOL should not be denied to the patients.

### PCA 52

#### FACIAL LESIONS IN LEPROSY – AN ANALYSIS

V V Pai, V Gaikwad and R Ganapati

Bombay Leprosy Project, Sion-Chunabhatti, Mumbai – 400 022, India

Face lesions in leprosy have a potential and a propensity to develop Type I Reaction and disability. Several studies published in literature supports this theory. In our experience, particularly patients with face lesions report with anxiety related to persistence of the lesions and attribute to the incurability of the disease.

In this study a total of 89 patients with face lesions were analysed from the available records of registered patients in our urban clinics located in Bombay over the past 5 years. 46 were adults and 43 were children. 22 were male adults and 24 were female adults. 19 were male children and 24 were female children.

The face lesions were analysed with reference to (i) distribution of lesions, (ii) clinical presentations and (iii) treatment of clinical problems. All these patients were either treated with standard WHO MDT or with intermittent therapy consisting of Rifampicin, Ofloxacin and Minocycline (1/3/6/12 doses)

It was observed from the analysis that 14 patients had lesions around the eye, 59 had lesions on the cheek, 10 had lesions on the cheek and forehead while 6 had the lesion on the nose. Among these 8 patients were found to have Type I Reaction, 6 reported with watering of the eyes and 1 with Type II Reaction. Incidentally none were found to have lagophthalmos, though 6 patients had watering of the eyes indicating early nerve function impairment. All patients with Type I Reactions were managed with a standard course of steroids for 3 months. 2 patients who did not respond to steroids were put on a course of Clofazamine in anti-inflammatory schedule for six months. In view of persisting erythema in 8 patients, despite the standard steroid course, they had to be put on topical sunscreen consisting of Titanium dioxide 1%, Calamine 6 % along with strict advice to avoid sunlight. The response was good and satisfactory.

**PCA 53****FENÔMENO DE LÚCIO NA GESTAÇÃO**

Luciana Pessoli Buffon, Reinaldo Leal, Paulo Ricardo Criado, Maria do Rosário Vidigal, Thaís Romero Gatti

Complexo Hospitalar "Padre Bento" de Guarulhos  
Serviço de Dermatologia Prof. Dr. Mário Cezar Pires  
Av. Emílio Ribas nº 1573 – Tranqüilidade – Guarulhos –SP

A gravidez associa-se a uma maior frequência dos estados reacionais relacionados à hanseníase. Um destes, o fenômeno de Lúcio, é observado entre os portadores da variedade difusa de Lúcio e Alvarado, sendo raro em nosso meio. Ilustrando esses fatos, relatamos um caso de fenômeno de Lúcio na gestação marcante por sua raridade, exuberância e evolução dramática.

Sem diagnóstico prévio de hanseníase; veio ao nosso serviço por apresentar áreas de necrose cutânea seca com contornos poligonais e estelares na face, tronco, membros superiores e em toda extensão dos membros inferiores; lesões eritemato-violáceas infiltradas com bordas irregulares na face, além de madarose e rarefação ciliar. Não havia evidências de comprometimento sistêmico nem fetal. O exame histopatológico foi compatível com fenômeno de Lúcio. Instituímos o tratamento específico para hanseníase, imunossupressão com doses altas de corticóides e antibioticoterapia de amplo espectro. Debridamentos cirúrgicos. No 39º dia de internação, após o óbito fetal seguido por abortamento espontâneo, a paciente desenvolveu insuficiência respiratória, evoluindo com óbito.

**PCA 54****FENÔMENO DE LÚCIO: RELATO DE 2 CASOS.**

Rodrigo Sestito Proto; Lúcia Mioko Ito; Ferruccio Fernando Dall'Áglia; Andréia Castanheiro Barbosa; Antonio José Tebcherani; Maurício Paixão.

Departamento de Dermatologia da Faculdade de Medicina do ABC.

Av Príncipe de Gales, 821- -09060-650-Santo André – SP- Brasil.

**Introdução:** Os autores relatam 2 casos de fenômeno de Lúcio em pacientes com hanseníase virchoviana.

**Relato dos casos:** Caso 1: JMF, branco, masculino, 52 anos, apresentou quadro súbito em membros inferiores e superiores de máculas livedóides e purpúricas que evoluíram para lesões ulcero-necróticas, ascendentes e dolorosas, evoluindo com septicemia. Apresentava infiltração difusa da face e madarose ciliar.

Negava afecção e tratamentos prévios para qualquer patologia. O exame histopatológico das lesões revelou proliferação endotelial focal dos vasos dérmicos, vasculite rica em bacilos (BAAR) e oclusão vascular por trombos. Caso 2: JAS, 78 anos, branco, natural do Piauí. Procurou o Posto de Saúde do Serviço Universitário com quadro de aparecimento repentino de áreas de necrose cutânea ascendentes, dolorosas em membros inferiores, superiores e lóbulos de orelhas. Ao exame dermatológico, apresentava infiltração da região frontal, com destruição do septo nasal. Negava doenças e tratamentos prévios. O exame histológico da face evidenciou hanseníase virchoviana e o quadro dos membros inferiores e superiores foi com patível com o de fenômeno de Lúcio.

**Discussão:** o fenômeno de Lúcio, também denominado de eritema necrotizante, foi descrito pela primeira vez por Lúcio e Alvarado como uma reação necrosante, ocorrendo em pacientes com hanseníase virchoviana e não nodular. Em 1948, Latapi e Zamora, reconheceram-na como sendo o estado reacional da forma difusa, ocorrendo em doentes com infecção avançada, sem tratamento específico adequado ou precedendo o início deste. Nos dois casos descritos, o fato da doença de base até então não ter sido detectada e tratada, favoreceu o diagnóstico, pois o fenômeno geralmente acomete indivíduos nesta situação.

**Motivo da apresentação:** Raridade e exuberância dos casos.

**PCA 55****FIRST DOCUMENTATION OF HISTOID FROM YEMEN**

Abdul Samid Al-Kubati, Abdul Rahim Al Samie, Abdu Ali

Office of the National leprosy control programme, P.O.Box.No.55722, Taiz, Republic of Yemen, Tel: 967 4 242306/7/9 Fax: 967 4 242308 Mobile 967 7928976

Histoid type of Lepromatous leprosy was first reported and described by Dr.Wade in 1963, Dr.Ramanujam, Dr.Ramu in 1969, Dr.Rodrigues in 1969 and Dr.Chaudhary in 1971. It is a variant of L.L. Clinically characterized by cutaneous and subcutaneous nodules with a distinctive histopathology or plaque like lesions. The typical cutaneous lesions are reddish, shiny, round, well-defined, firm and non-tender nodules, arising from normal skin, resemblance to neurofibromatosis. Histoid leprosy occurs in patients, whose disease is relapsing on behalf of the discontinued treatment prematurely, or due to the causative organism, *M.leprae*, has become drug resistant. In this subject we are reporting the first case of Histoid leprosy from Yemen after intake of MDT for 5 months, and discontinuing for 10 years.

### PCA 56

#### FREQUENCY OF ANEMIC PROFILES IN PATIENTS WITH LEPROMATOUS LEPROSY UNDER DAPSONE TREATMENT

Dirceu Dalpino

Instituto Lauro de Souza Lima of Bauru - SP Brazil

The anemia can be defined as the presence of hemoglobin rates lower 13 grams/dl in the man and 12,0 grams in the woman. It's great variety for the appearance of an anemic picture, however in our study, two factors has larger relevance. The leprosy is a disease of chronic evolution and the dapsone, a drug oxidizer, used in your treatment. The anemia of chronic disease may also present as a microcytic anemia.

In a retrospective rising of 148 lepromatous leprosy patients assisted at this Institute in the year of 2001 and submitted to hematology's exams, we observed the presence of lower hemoglobin rates above to the limits described in 37,1% of these patients, and this rate was 11,1% in a group control of 144 patients. There was not difference significant statistics in relation to the patients' sex.

Table 1—Medium values and d. pattern of the patients' variables and control group.

Variable	Leprosy patients		control group		p
	Average	d. pattern	Average	d. pattern	
Age	50,61	15,419	50,67	15,547	ns
Hemoglobin	13,04	2,097	14,09	1,568	P<0,001
Hematocrit	39,56	6,375	42,81	4,357	P<0,001
VCM	88,21	5,014	89,38	1,409	P<0,01
HCM	29,05	1,0950	29,29	1,172	P<0,01
CHCM	32,98	1,317	32,86	1,156	Ns

There was not difference significant statistics as in the anemia presence when compared in relation to the sex. We found significant statistical difference (p < 0.001) when we compared the patients' group with the group control in the presence of hemoglobin rates lower the minimum levels.

### PCA 57

#### HANSEN'S DISEASE IN CHILDHOOD: A STUDY OF PHYSICAL DISABILITY

Maria de Fátima Marója, Adriana C. Saraiva, Valderiza Pedrosa, Maria Anete Queiroz and Lúcio T. Ihára

Fundação Alfredo da Matta – Rua Codajás, 25, - Manaus – Amazonas

In the State of Amazonas, Hansen's disease still represents a very important public health problem. The prevalence, comparing the coefficient of 127,6/10.000 inhabitants in 1988 and 10,3/10.000 inhabitants in 2000, has reduced significantly, however it has still not reached the elimination aim. Detection of new cases, has shown it to be hyper-endemic, with a coefficient of 4,4/10.000 inhabitants in 2000. Amongst the new cases detected, 82,1% presented disability Level 0, only 6,5% presented level II and

III, considered medium by national standards. In children younger than 15, the detection coefficient may be considered hyper-endemic, with a coefficient of 1,2/10.000 inhabitants. Hansen's disease in childhood reflects up to a certain point the aspects of this disease in the adult. The project's general objective is to evaluate Physical disability in children younger than 15, diagnosed with Hansen's disease. 216 patients were evaluated, diagnosed and treated at the "Fundação Alfredo da Matta" between January 1998 and January 2001, of these 57,4% were male. The age group most affected was between 11 and 15 years (60,6%). Paucibacillary forms represented 59,7% of the cases. 90,4% presented disability level 0, 4,8% I and 4,8% II and III. Of the 134 patients that were given discharge during the study, 63,4% were not evaluated for disability at discharge. Of those cases evaluated, 89,8% presented disability level 0, 6,1% level I and 4,1% level II and III. The disability level at diagnosis compared to that at discharge, show a worsening of 4,08%. However, this value is probably sub estimated, due to the high percentage of cases not evaluated at discharge.

### PCA 58

#### HANSEN'S DISEASE RELAPSE IN THE CONTROL PROGRAMME OF AMAZONAS STATE

Maria de Fátima Marója, Valderiza Pedrosa, Emilia Santos Pereira, Maria Del Pilar Berbegal, Maria da Graça Souza Cunha and Antonio Pedro Schetinni

Fundação Alfredo da Matta – Rua Codajás, 25 – Manaus – Amazonas

Hansen's disease represents an important public health problem in the State of Amazonas with a detection co-efficiency of 4,4 /10.000 inhabitants and Prevalence of 10,3/10.000 inhabitants, having reduced significantly. One of the contributing factors for this reduction in prevalence was the introduction of multi-drug therapy in 1982, with patients receiving discharge as cured in shorter periods. Relapse after MDT may occur, according to the World Health Organisation in very low percentages, according to WHO, in 0,7% for multi-bacillar cases and 1,07% for paucibacillar. Our study's objective was to determine the percentage of relapse in Hansen's disease in patients registered in the Amazonas State Control Programme. A descriptive study was carried out with evaluation of notified cases of relapse from Manaus and the interior, between 1982 and 2001. Of the total number of patients given discharge as cured, 226 cases of relapse were notified, representing 0,95%. Relapse was more frequent in MB forms. The mean period between discharge and relapse was 7 years in MB cases and 4 for PB. In relapse, the slit skin smear index in MB presented a mean of 3,25. The disability level worsened between discharge and relapse in 32,6% of the cases.

**PCA 59****HANSENÍASE ASSOCIADA À FEOHIFOMICOSE**

Heitor de Sá Gonçalves; Ricardo Américo de A. Lima; Ana Célia de A. Mesquita; Ruth Helena O. Menezes; Rose Mary P. Guilhon

Centro de Dermatologia Dona Libânia – SESA – CE  
Av. Pedro I, 1033 – Centro – Fortaleza – CE

MMF, 48 anos, masculino, branco, eletrotécnico, natural e procedente de Fortaleza – CE. Paciente em tratamento para MHBV há 22 meses, com queixa de “caroços no pé” há 7 meses, referindo ter feito drenagem do mesmo em serviço de Cirurgia, apresentando laudo histopatológico inconclusivo. Ao exame dermatológico: lesões inativas de MH e lesões nodulares, eritematosas, em número de três (03), medindo 5 cm no maior diâmetro, pouco dolorosas, eliminando secreção vermelha, localizadas em pé esquerdo. Exames microbiológicos: pesquisa e cultura para BK e germes piogênicos – negativas; micológico direto – hifas demáceas septadas com aspecto toloróide; cultura para fungos – *Exophiala icanpelnei*. Histopatológico: compatível com micologia. Tratamento: Cetoconazol e exérese cirúrgica. Motivo da apresentação: raridade da associação.

**PCA 60****HANSENÍASE COM PSORÍASE**

Sabrina L.C. Maciel, Suzana Kally M.B. Rapozo, Jaison Antonio Barreto, Deise Ap. dos Santos Godoy, Raul Negrão Fleury

Instituto Lauro De Souza Lima

Rod. Cte. João Ribeiro de Barros, km 225/226, Bauru – SP, CEP: 17034-971, Cx. Postal: 3021, Fone: (14) 221 5900, FAX: (14) 221 5914, E-mail: [ensino@ils.br](mailto:ensino@ils.br).

Sabrina Lacerda Cardoso Maciel: Fone: (14) 230 5392, E-mail: [sabrimaciel@hotmail.com](mailto:sabrimaciel@hotmail.com).

JC, 72 anos, masculino, leucodérmico, casado, lavrador, natural de Botucatu - SP, residente em Itapuí – SP.

**HMA:** Há três anos notou manchas vermelhas em dorso e abdome “adormecidas”. Há um ano, somaram-se ao quadro placas eritematodescamativas em membros inferiores e antebraços que pioravam quando o paciente sente-se nervoso e melhoram quando se expõe ao sol.

**AP:** Tratamento em centro de saúde por dez anos, a partir de 1956.

Parou de fumar há mais ou menos cinquenta anos.

Hipertensão arterial em tratamento irregular.

**AF:** Nega outros casos semelhantes na família.

**Exame Dermatológico:** Máculas hipocrômicas residuais em tronco, ombros e abdome ao lado de máculas hipocrômicas com eritema e infiltração marginal e placas eritematopardacentas mal delimitadas.

Placas eritematodescamativas com descamação lamelar e sinal do orvalho sangrante em membros inferiores e em menor número nos antebraços. Nas coxas, observa-se placas eritematopigmentares planas, entremeadas com áreas de pele normal.

Amiotrofia hipotenar e de primeiro interósseo dorsal na mão direita, retratação móvel de quarto quirodáctilo e fixa de quinto quirodáctilo direitos.

**Exames Realizados:** Hemograma: hemácias 4,97 mi, Hb: 52% (morfologia normal), leucócitos 6700 (diferencial sem alterações), plaquetas 265.000, glicemia de jejum 103mg%, Mitsuda= negativo, Baciloscopia: IB: 1,5; IM: 0.

**Histopatológico:** placas eritematopardacentas – infiltrado multifatorial, de pequena extensão, constituído de células epitelióides pouco diferenciadas e linfócitos. Baciloscopia 3+, (presença de bacilos típicos); placa eritematodescamativa de membro inferior – hiperplasia epitelial característica com hiperqueratose, paraqueratose e pequenos acúmulo de neutrófilos fragmentados em capa córnea. Focos de exocitose neutrofílica com espogiose. Baciloscopia: bacilos em macrófagos não diferenciados e em ramos nervosos.

**Tratamento e Evolução:** indicado PQT para multi-bacilar por vinte quatro meses 9fará tal tratamento em posto de saúde de região); prescrito liquor carbonis detergens (LCD) 10% em gel para lesões dos membros inferiores.

**PCA 61****HANSENÍASE DIMORFA E AIDS – APRESENTAÇÃO DE 4 CASOS**

Marli Izabel Penteado Manini, Maria Ângela Bianconcini Trindade, José Homero Masetti, Mirian Aparecida Leite, Marcos Alberto M. Nogueira, Maria Denise Takahashi.

Instituição: Divisão de Hansenologia e Dermatologia Sanitária da Secretaria da Saúde do Estado de São Paulo

**Introdução:** A influência da AIDS na evolução clínica e na resposta ao tratamento da hanseníase não está esclarecida.

**Relato dos casos:** Os quatro indivíduos manifestaram hanseníase dimorfa durante o tratamento da AIDS. Três do sexo feminino e 1 do masculino. As idades variaram de 27 a 44 anos. No momento do diagnóstico da hanseníase, dois indivíduos apresentaram baciloscopia positiva e reação de Mitsuda en-

tre 7 e 10 mm. Todos apresentaram no exame histológico células epitelióides com baciloscopia positiva. A reação tipo 1 (resposta imune celular) ocorreu em um indivíduo no momento do diagnóstico da hanseníase e em outro durante a evolução do tratamento da hanseníase.

**Motivo da apresentação:** Demonstrar as características clínicas, histológicas e a evolução do tratamento da hanseníase em casos desta co-infecção.

### PCA 62

HANSENÍASE DIMORFA E VIRCHOWIANA EM MENORES DE 15 ANOS – APRESENTAÇÃO DE 8 CASOS

Marli Izabel Penteadó Manini, Maria Ângela Bianconcini Trindade, José Homero Masetti, Mirian Aparecida Leite, Marcos Alberto M. Nogueira, Maria Denise Takahashi.

Divisão de Hansenologia e Dermatologia Sanitária da Secretaria da Saúde do Estado de São Paulo

**Introdução:** A hanseníase em menores de 15 anos é pouco freqüente e muito pouco estudada. As formas bacilíferas (V e D) e as reações que podem ocorrer nestas formas podem gerar incapacidades que acarretarão muitas dificuldades na vida destes menores.

**Relato dos casos:** Os menores foram diagnosticados nos últimos 5 anos como hanseníase dimorfa ou virchowiana com baciloscopia positiva. A idade variou de 9 a 14 anos, 3 eram do sexo feminino e 5 masculino. Quatro apresentaram reação tipo 1 e 3 tipo 2. Todos apresentavam incapacidades sendo três com deformidades.

**Motivo da apresentação:** Realçar a importância do diagnóstico precoce em menores de 15 anos.

### PCA 63

HANSENÍASE DIMORFA REACIONAL E LESÃO NEURAL

Patrícia Araújo e Ademir Figueiredo.

Serviço de Dermatologia-FCM/HUPE - UERJ

**Introdução:** Os episódios agudos extracutâneos com acometimento neural periférico são frequente no grupo Dimorfo, após as manifestações cutâneas, embora é citado por vários autores, a presença precípua dos bacilos nos nervos periféricos, nas formas disseminadas do grupo dimorfo.

**Relato do caso:** Paciente masculino, pardo, 39 anos, casado, pedreiro, desempregado, residente no Rio há 15 anos. Há 4 meses apresentou “dormência” no 1° e 2° pododáctilos e dorso do pé direito. Em seguida, refere intensa dor no joelho direito durante 15 dias,

que melhorou com antiinflamatórios, mas que evoluiu com dificuldade de mobilização do pé direito. Após um mês destes sintomas, surgiram “manchas avermelhadas” no tronco, que se “espalharam” pelo corpo, com queixa de “formigamento” nestas lesões. Apresentava placas eritemato-infiltradas, urticariformes, algumas com pigmentação violácea, localizadas no tronco, braços, coxas e pernas, poupando a face. Hiperestesia bilateral do nervo fibular (mais à dir.) e parestesia. Défice motor com abolição da dorso-flexão do pé direito (pé caído). Pesquisa de BAAR foi positiva 2+ com raras globias e a biópsia foi compatível com HDVr e a coloração para bacilo positiva 4+(Fite).

**Motivo da apresentação:** HDV reacional com neurite do fibular direito e paresia muscular flexora do pé direito. Sintomas e sinais neurológico, que antecederam as manifestações cutâneas.

**Comentário:** A presença da grande quantidade de histiócito com citoplasma abundante e vacuolizado neste caso, é proporcional a uma multiplicação bacilar, tanto à nível de pele e nervo, mostrando uma degradação progressiva da imunidade celular, evoluindo para o polo V. Job, C.K. (1996). Nerve in reversal reaction. *Indian J. Lepr.* 68(1):43-7.

### PCA 64

HANSENÍASE EM PACIENTE AIDÉTICO COM ANTECEDENTES DE CRIPTOCOCOSE CUTÂNEA E NEUROLÓGICA

Rodrigo Sestito Proto; Lúcia Mioko Ito; Ferrucio Fernando Dall'Áglío; Eduardo Lacaz Martins, Maurício Zanini

Departamento de Dermatologia da Faculdade de Medicina do ABC.

Av Príncipe de Gales, 821 - -09060-650-Santo André - SP- Brasil.

**Relato do caso:** Os autores relatam um caso de paciente masculino, branco, 45 anos, aidético, tendo como manifestação inicial criptococose cutânea, evoluindo para a forma cerebral, com resolução total do quadro após internação. Um mês após alta, notou diminuição da sensibilidade em membro inferior direito, seguido do aparecimento de placa eritemato-descamativa, infiltrada de 20 cm de diâmetro, bordas ulceradas e acompanhado de neurite e topografia do nervo ciático poplíteo externo. O exame histológico foi compatível com o de hanseníase dimorfo-tuberculóide.

**Discussão:** Nos pacientes com AIDS, nunca foi encontrado um aumento maior da prevalência de hanseníase. Embora um paciente aidético possa ter evidências laboratoriais típicas de uma imunossupressão, a resposta imunológica ao *M. leprae* é

essencialmente desconhecida. Considera-se que o *M. leprae* não causa a doença em pacientes com infecção prévia ao HIV, posto que a hanseníase necessita de uma imunidade celular funcionante para causar a doença clínica. Estudos epidemiológicos futuros serão necessários para compreendermos esta co-infecção.

**Motivo da apresentação:** Raridade e exuberância do caso.

### PCA 65

HANSENÍASE EM SACO ESCROTAL – RELATO DE UM CASO

Sousa, A.R.D.; Aires, M.A.P.; Lima, R.A.A.; Mesquita, A.C.A.; Lima, S.M.E.S.

Centro de Dermatologia Dona Libânia – SESA - CE  
Av. Pedro I, 1033 – Fortaleza - CE

A hanseníase é doença crônica contagiosa, causada pelo *M. leprae*, bacilo de alta infectividade, com baixa patogenicidade e virulência. Constitui-se num grande problema de saúde pública em países subdesenvolvidos, pelas graves sequelas consequentes ao não tratamento da moléstia. Os autores relatam um caso de hanseníase tuberculóide em saco escrotal. AFR, 36 anos, há um ano com placa eritemato-infiltrada, de bordas elevadas, medindo 7cm no seu maior eixo, localizada em saco escrotal, relatando o paciente, dormência local. Realizada investigação diagnóstica que mostrou baciloscopia negativa e histopatológico compatível com MHT. Iniciado PQT/PB em agosto/2000, com acompanhamento ambulatorial, obtendo-se boa resposta terapêutica. Motivo da apresentação: raridade de localização e exuberância da lesão.

### PCA 66

Cláudio de Lélis Filgueiras de Souza; Avani Soares Almeida Magalhães; Elisa Oliveira Gonçalves Antunes; Mariza Bárbara Rissuto; Wendel Antônio Fagundes

Serviço de Hanseníase da S.M.S. de Alfenas (MG)

Pça. Dr. Fausto Monteiro, 300 Centro Alfenas-MG  
CEP 37130-000

Os autores apresentam a história da família do paciente A.G.S., 27 anos do sexo masculino, apresentando quadro de hanseníase virchowiana, sua esposa M.A.S., 25 anos e seus três filhos B.G.S., 3 anos, S.G.S., 5 anos e E.G.S., 6 anos de idade vindos da região norte de Minas Gerais, cidade de São Sebastião do Maranhão, onde segundo os dados da Secretaria de Estado da Saúde não houve casos registrados de hanseníase no ano de 2001.

**Motivo da Apresentação:** Reforçar a importância do exame dos contratos como forma de diagnóstico precoce.

### PCA 67

HANSENÍASE HISTÓIDE: RELATO DE 2 CASOS

Lúcia Mioko Ito; Rodrigo Sestito Proto; Andréia Castanheiro Barbosa; Antonio José Tebcherani; Nobuo Matsunaga; Fábila Oppido Schalch

Departamento de Dermatologia da Faculdade de Medicina do ABC.

Av Príncipe de Gales, 821 - -09060-650-Santo André – SP- Brasil.

**Relato dos casos:** Os autores relatam 2 casos de pacientes com hanseníase históide.

**Caso 1:** IMR, 65 anos, branca, feminina, natural e procedente de Santo André, apresentava há 4 meses, pápulas e nódulos eritemato-brilhantes em membros inferiores, nádegas e dorso, assintomáticas de 0,5 a 1,0 centímetro de diâmetro. Não havia espessamento de nervos ou infiltração da face. Negava qualquer tratamento anterior para hanseníase. O exame histológico evidenciou proliferação de histiócitos fusiformes de forma estoriforme, com inúmeros bacilos. Instituído tratamento específico para multi-bacilar, houve boa evolução com regressão das lesões em número e tamanho.

**Caso 2:** MJS, 52 anos, branca, natural e procedente de São Bernardo do Campo. Há 2 meses passou a apresentar pápulas e nódulos normocrômicos, superfície brilhante, “dermatofibroma like”, assintomáticos, em membros inferiores e abdome. O exame histológico evidenciou hanseníase históide. Relata ainda que há 2 anos, apresentou placas eritematosas em face, tórax, membros e foram diagnosticados como hanseníase virchowiana, mas a paciente não realizou tratamento instituído.

**Discussão:** Hanseníase históide foi inicialmente descrita por Wade como uma variante da forma virchowiana em 1960, embora outros autores a considerem como uma entidade distinta. Pode ocorrer em pacientes que já tinham sido submetidos a tratamento anterior com sulfona, ou virgens de tratamento. Lesões históides também foram descritas em pacientes com hanseníase dimorfa e indeterminada. Caracteriza-se por pápulas, placas e nódulos bem delimitados, brilhantes. Segundo alguns autores, as características histológicas do nódulo históide poderiam ser agrupadas em um espectro englobando 3 categorias baseadas na presença de células fusiformes e histiócitos vacuolizados.

**Motivo da apresentação:** Raridade e exuberância dos casos.

**PCA 68****HANSENÍASE HISTÓIDE**

Dalila Filomena Mohalem, Maria do Rosário Vidi-gal, Mônica Nóbrega Cunha, Ederli Assunção Ruiz, Antonio José Tebcherane

Centro de Saúde Tranquilidade  
Secretaria de Saúde de Guarulhos  
Av. Emílio Ribas, nº 1845 – Guarulhos – SP.

Paciente havia feito cirurgia de varizes dos MMII com aparecimento de lesão elevada na cicatriz cirúrgica. O estudo anatomopatológico desta lesão mostrou laudo de dermatofibroma. Foi submetida à infiltração com corticóide sem melhora. Posteriormente surgiram lesões semelhantes em MMSS quando foi encaminhada ao Centro de Saúde e realizada nova biopsia com o resultado de hanseníase Virchowiana. Solicitado coloração de Ziel Nielsen da primeira lâmina (lesão inicial) que mostrou globias.

**PCA 69****HANSENÍASE HISTÓIDE**

Francisca Estrela Dantas Maroja; Flávia Estrela Maroja; Maria Das Graças Videres De Almeida; Mohamed Azzouz; Carla Wanderley Gayoso; Carlos Alberto Fernandes Ramos; Germana Brígida Queiroga Estrela

Universidade Federal Da Paraíba  
Hospital Universitário Lauro Wanderley

Os autores apresentam o caso de J.P.S., 27 anos, faiodérmico, natural e procedente de Mamanguape-PB que ao exame apresentava lesões nodulares endurecidas, algumas eritematosas, outras de coloração normal da pele, algumas ulceradas de fundos lisos, isoladas e localizadas no tronco, membros inferiores e superiores com início há 04 anos. Apresentava ainda pavilhões auriculares infiltrados, nervos ulnar e fibular espessados e não dolorosos. Diagnóstico: Hanseníase Históide confirmada pelo anátomo-patológico. Foi instituído tratamento com poliquimioterapia com boa evolução e melhora das lesões.

**Motivo da Apresentação:** exuberância das lesões

**PCA 70****HANSENÍASE INFANTIL NA PARAÍBA**

Francisca Estrela Dantas Maroja; Tereza Cristina Moura Rodrigues; Dulce Emília Ataíde Estrela; Flávia Estrela Maroja; Germana Brígida Queiroga Estrela; Francimary De Souza Buriti

Universidade Federal Da Paraíba  
Hospital Universitário Lauro Wanderley  
Pam De Jaguaribe

Centro De Estudos Dra. Francisca Estrela Dantas Maroja

Os autores analisaram os dados epidemiológicos da evolução da hanseníase infantil na Paraíba no período de 1976 a 2001, com idade de 0 a 14 anos, avaliando o tratamento instituído, o acompanhamento clínico, a cura ou abandono da terapêutica, avaliação da incapacidade física, reações que possam ter ocorrido durante a evolução e seguimento dos casos.

**PCA 71****HANSENÍASE MULTIBACILAR EM BEBÊ DE 13 MESES – EVOLUÇÃO APÓS 7 ANOS DO DIAGNÓSTICO**

Alexandre Castelo Branco<sup>1</sup>, Luiz Cosme Cotta Malaquias<sup>2</sup>, Francisco Carlos Félix Lana<sup>3</sup>, Regina Lúcia Barbosa Cypriano<sup>1</sup>, Francisco Carlos Pereira<sup>1</sup>, Mara Firmato Esteves<sup>1</sup>, Simone Teixeira<sup>4</sup>, Andressa Masiero Santos<sup>4</sup>, Maria Cristina Souza Felipe da Silva<sup>5</sup>, Jorge Eduardo Tavares de Lima<sup>1</sup>, Sebastião Fontes Santiago<sup>1</sup>

<sup>1</sup>Policlínica Central Municipal de Saúde, Gov. Valadares, MG, Brasil;

<sup>2</sup>Faculdade de Ciências, Educação e Letras/UNI-VALE, Gov. Valadares, MG, Brasil;

<sup>3</sup>Escola de Enfermagem/UFMG, Belo Horizonte, MG, Brasil;

<sup>4</sup>Secretaria Municipal de Saúde, Gov. Valadares, MG, Brasil;

<sup>5</sup>Diretoria Regional de Saúde, Gov. Valadares, MG, Brasil.

Expõe-se o quadro clínico inicial de hanseníase multibacilar em um bebê de treze meses, apresentado por ocasião do IX Congresso da Associação Brasileira de Hansenologia e IV Congresso do Colégio de Hansenologia dos Países Endêmicos, em Foz do Iguaçu, e o quadro apresentado cinco anos após ter concluído tratamento PQT-MB de 24 doses.

**PCA 72****HANSENÍASE NA INFÂNCIA**

Antônio Renê D. de Sousa; Rose Porto O. Guillhon; Francisco José D. Branco; Maria Luci Landin T. Ferreira

Centro de Dermatologia Dona Libânia – SESA – CE  
Av. Pedro I, 1033 – Centro – Fortaleza – CE

De um total de 878 casos novos detectados pelo serviço no ano de 2001, 78 (8,8 %) pertenciam à faixa etária de menores de 18 anos. Destescasos, 3 (0,3 %) tinham 5 anos ou menos; 19 (2,1 %) tinham 10 anos ou menos; e 64 (7,2 %) tinham 15 anos ou menos. Quanto ao sexo, 47 (57,3 %) eram masculi-

nos; e 35 (42,7 %) eram femininos. No que se refere às formas clínicas, 2 (2,4 %) eram indeterminadas (I); 37 (45 %) eram tuberculóides (T); 34 (41 %) eram dimorfas (D); 8 (9,8 %) eram virchowianas (V); e 1 (1,2 %) foi não-especificado. De acordo com a classificação operacional, 89 (47,6 %) eram paucibacilares e 43 (52,4 %) eram multibacilares., sendo 22 (26,8 %) portadores de baciloscopia positiva, 58 (70,7 %) portadores de baciloscopia negativa e 2 (2,4 %) com baciloscopia não especificada. Quanto ao grau de incapacidade física, 67 (81,7 %) tinham grau zero; 8 (9,8 %) tinham grau I e 7 (8,5 %) tinham grau II no início do tratamento.

### PCA 73

HANSENÍASE NA INFÂNCIA NO MUNICÍPIO DE CURIONÓPOLIS - SUDESTE DO ESTADO DO PARÁ - RELATO DE CASO

S. Amador<sup>1</sup>, V.R. Barros<sup>2</sup>, P.J.B.S. Albuquerque<sup>3</sup>, M.I.F. Buna<sup>4</sup>, J.M. Campos<sup>5</sup>

Instituto Evandro Chagas, Rodovia BR-316, Km 07, Ananindeua-Pará<sup>1,2,3,4</sup>

Centro de Saúde Enfermeira Silvina da Paz - Av. Brasil S/N CEP=68-523-000<sup>5</sup>

Hanseníase na infância, especialmente casos polarizados demonstram a magnitude do problema e refletem a intensidade de exposição ao *Mycobacterium leprae*, em determinada região. Apesar de não ser freqüente, requer intervenção criteriosa e gera questionamentos sobre a operacionalização das atividades para o controle desta nosologia milenar. Os autores relatam um caso de hanseníase dimorfa clássica em menor de três anos de idade, contato de hanseníase virchowiana (o pai), inclusive com suspeita de resistência primária e hanseníase dimorfa (o irmão). A menor, com baixo peso para a idade, não exibiu nenhuma cicatriz de BCG ao diagnóstico, embora fosse contato. O resultado do exame histológico revelou: "Infiltrado inflamatório difuso, linfocitocitário, respeitando o limite dermo-epidérmico." A coloração especial (Fite-Faraco) revelou raros bacilos álcool-ácido resistentes (BAAR).

**Palavras-chave:** Hanseníase, Epidemiologia, Pediatria

### PCA 74

HANSENÍASE NEURAL PURA EM CRIANÇA DE 12 ANOS

Dalila Filomena Mohalem, Maria do Rosário Vidigal, Aldo Sarpieri, Antonio José Tebcherane

Centro de Saúde Tranqüilidade

Secretaria de Saúde de Guarulhos

Av. Emílio Ribas, nº 1845 – Guarulhos – SP.

Paciente de 12 anos de idade foi encaminhado pelo neurologista em decorrência de amiotrofia de interosseos da mão esquerda com reabsorção óssea da falange distal do 5º quirodáctilo. O paciente era goleiro e sofria traumatismos freqüentes. Mitsuda de 6 mm, baciloscopia negativa, biópsia de nervo: processo inflamatório granulomatoso, eletroneuromiografia apresentando processo neurológico periférico acometendo nervo mediano. E ao nível do punho e intensamente no nervo ulnar E ao nível do cotovelo.

### PCA 75

HANSENÍASE NO BRASIL: ESTUDOS DE ENFERMAGEM E TENDÊNCIAS DAS PUBLICAÇÕES NA ÚLTIMA DÉCADA

Alessandra Maria Alves De Sousa

Trata-se de um estudo retrospectivo, exploratório descritivo, onde objetivamos fazer o levantamento das publicações da Associação Brasileira de Enfermagem (ABEn) em livros de resumos de congressos, dissertações, teses e artigos da Revista Brasileira de Enfermagem, sobre a temática Hanseníase. Estas publicações no total de quarenta e seis, foram distribuídas em dois grupos situando os trabalhos e autores. Os dados foram agrupados por tipos de publicações, procedência e ano, apresentados em gráficos, quadros e tabelas. Os resultados destacam estudos descritivos concentrados, principalmente, no Estado de São Paulo, com ênfase para estudos qualitativos sobre assistência, pontuando aspectos relacionados à humanização do "cuidar" ao doente de Hanseníase.

### PCA 76

HANSENÍASE NODULAR DA INFÂNCIA: EVOLUÇÃO EM 20 ANOS.

Fátima MoRabay; Márcia Orso; Ivonette Silva; J.L. Cardoso

Universidad de Taubaté, Serviço de Dermatologia; Centro de Saúde da Lapa,SP.

Av Granadeiro Guimarães 270, Taubaté (SP)

**Introdução:** São escassos os relatos de Hanseníase Nodular da Infância (HNI). OPROMOLLA (2000: 52), ressalta a ocorrência em crianças de 1 a 4 anos, com lesões que regridem espontaneamente, deixando cicatriz atrófica. O Mitsuda é positivo e geralmente não deixam seqüela.

**Relato do Caso:** EGF, masc., 11 anos, procedente de Capital (SP), em 1982 foi à consulta com "carocinho na barriga há muito tempo". Pai e mãe com diagnóstico de MHV. Ao exame,lesão sarcoídica única na região supra umbilical. A histopatologia revelou estruturas tuberculóides. O Mitsuda foi fortemente pos-

itivo. Com diagnóstico de HNI, sem indicação de tratamento, foi acompanhada em ambulatório por 5 anos, tendo alta definitiva com 2 lesões cicatríciais nas regiões supra umbilical e na face medial do braço E. Após 20 anos, ainda apresentava 2 lesões atróficas.

**Motivo Apresentação:** registro iconográfico de HNI, com evolução de 20anos.

### PCA 77

HANSENÍASE: O NÚMERO DE LESÕES CUTÂNEAS E OS EXAMES BACILOSCÓPICOS

Gallo, M.E.N.; Novaes, A.; Albuquerque, E.C.A.; Nery, J.A.C.; Sales, A.M.

Centro Colaborador Nacional em Hanseníase – FIOCRUZ – RJ

A integração das ações de controle da hanseníase nas ações básicas de saúde, fundamentou a atualização das normas da legislação sobre o controle da doença. A classificação operacional visando a alocação na poliquimioterapia seja a recomendada pela OMS, baseada no número de lesões cutâneas. São paucibacilares (PB) os casos com até 5 lesões de pele e multibacilares (MB) os com mais de 5 lesões de pele. Com o objetivo de avaliar este método clínico de classificação, correlacionou-se os resultados das baciloscopias cutâneas com o número de lesões cutâneas. A fonte de informações foi o banco de dados com informações epidemiológicas, clínicas e laboratoriais dos pacientes. Foi selecionado o dado referente a baciloscopia de 837 casos no período de 1986 a 1999. Comparou-se o item número de lesões tomando como método padrão referência o resultado das baciloscopias cutâneas. A partir desta comparação foram calculadas a sensibilidade e a especificidade relativas bem como os valores preditivos positivo e negativo do critério lesão cutânea e avaliada a concordância entre o número de lesões e a baciloscopia através do cálculo do índice Kappa (k). Entre os 837 casos avaliados, 652 apresentavam baciloscopias positivas e 185 negativas; destes 30 (16,0%) apresentavam mais do que 5 lesões cutâneas. Entre os 652 baciloscópicamente positivos, 68 (11,4%) apresentavam menos de 5 lesões cutâneas. Em relação a sensibilidade e especificidade do método clínico encontramos o valor preditivo negativo foi de 30,5% enquanto que o valor preditivo positivo foi de 95%. O método clínico baseado no número de lesões apresenta limitações que não invalidam a sua operacionalidade, porém há necessidade de novos critérios que possibilitem uma melhor acurácia na alocação dos pacientes nos esquemas poliquimioterápicos.

### PCA 78

HANSENÍASE: RECIDIVAS PÓS POLIQUIMIOTERAPIA COM DURAÇÃO FIXA

Nery, J.A.C.; Lopes, A.C.S.; Albuquerque, E.C.A.; Machado, A.M.; Gallo, M.E.N.

Centro Colaborador Nacional em Hanseníase - IOC – FIOCRUZ R.J.

A Poliquimioterapia com duração fixa para hansenianos é utilizada em nosso serviço, desde 1986. A alta terapêutica é fundamentada nos critérios número de doses supervisionadas e tempo de tratamento. Apresentamos características clínico-epidemiológicas de hansenianos que recidivaram após terem sido submetidos a PQT/OMS. O estudo abrange um total de 1.584 pacientes tratados no período de 1986 à 2000 que receberam alta obedecendo os critérios de regularidade ao tratamento. Os casos diagnosticados como paucibacilares (PB) foram tratados com Rifampicina (RFM) 600mg, uma vez ao mês supervisionadas associadas a Dapsona (DDS) 100mg diárias auto-administradas com duração de 06 doses em até 09 meses. Os diagnosticados como multibacilares (MB) receberam RFM 600mg e Clofazimina (CFZ) 300mg, uma vez ao mês supervisionadas e DDS 100mg e CFZ 50mg, diárias auto-administradas com duração de 24 doses em até 36 meses. Um total de 03 casos (0,18%) foram diagnosticados clinicamente como recidiva, sendo 2 submetidos ao esquema preconizado para os PB e 1 do esquema para os MB. Os pacientes foram submetidos a exames laboratoriais cujos resultados confirmaram o diagnóstico clínico. A presença de reação hansênica pós alta foi observada em todos os casos. O tempo decorrido entre a alta e a recidiva variou de 3 à 8 anos. O estudo demonstrou que apenas um pequeno percentual de casos recidivou e o longo tempo decorrido entre a alta e o diagnóstico de recidiva. Todos os pacientes foram reintroduzidos nos esquemas poliquimioterápicos indicados e estão sendo acompanhados criteriosamente e nos que já completaram o novo ciclo de tratamento a evolução foi satisfatória, afastando a possibilidade de quimioresistência, sugerindo terem as recidivas ocorrido por persistência bacilar.

### PCA 79

HANSENÍASE TUBERCULÓIDE SIMULANDO NECROBIOSE LIPOÍDICA

Gustavo Alonso Pereira, Maria Helena Garrone, Leontina da Conceição Margarido

Departamento de Dermatologia do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo(USP).

**Introdução:** Necrobiose lipóidica é uma dermatose caracterizada pela presença de placas amareladas e centro atrófico, localizadas preferencialmente nos membros inferiores. Está associada ao diabetes melitus, sendo que 2/3 dos doentes apresentam diabetes e 0,3% dos diabéticos apresentam esta dermatose.

**Relato de caso:** Os autores relatam um caso de uma

doente feminina, 27 anos, natural e procedente de São Paulo que apresentava ao exame dermatológico placas eritemato-amareladas, de bordas bem definidas e superfície levemente papulosa em ambas as pernas. A paciente negava antecedente pessoal ou familiar de diabetes melitus. Ao exame complementar as placas apresentam áreas de anestesia e hipoestesia térmica, estando preservada a sensibilidade tátil e a dor. Realizado teste de pilocarpina-iodo que resultou incompleto. A paciente foi então, submetida a uma biópsia por punch, que evidenciou infiltrado inflamatório linfocitocitário perivascular na derme papilar e reticular média, ectasia vascular com extravasamento de hemácias, além de presença de bacilos álcool ácido resistentes íntegros.

**Discussão:** A Moléstia de Hansen pode ter diversas apresentações clínicas, contudo, simulando necrobiose lipoídica é uma apresentação clínica rara. É descrito o fato da necrobiose lipoídica apresentar anestesia cutânea, não somente térmica, como também tátil. Isto poderia inicialmente confundir o diagnóstico e dificultar a diferenciação com a forma tuberculóide da Hanseníase, contudo, o achado de bacilos álcool-ácido resistentes íntegros no material submetido a exame histopatológico não deixa dúvidas quanto ao diagnóstico.

**Conclusão:** Hanseníase é doença de alta prevalência na nossa comunidade, podendo se apresentar clinicamente de diversas formas. Portanto, o diagnóstico de Hanseníase, deve ser lembrado sempre que a clínica for compatível. O teste de sensibilidade térmica é simples e de fácil aplicação, podendo descartar ou aumentar as suspeitas quanto ao diagnóstico da Moléstia de Hansen. Sempre que houver suspeita clínica e hipoestesia ou anestesia térmica da lesão, uma biópsia deve ser obtida, além dos testes de pilocarpina ou histamina, visando o diagnóstico de Hanseníase.

### PCA 80

#### HANSENÍASE VIRCHOVIANA - REATIVANDO COMO HANSENÍASE DIMORFA REACIONAL

Sabrina L.C. Maciel, Suzana Kally M.B. Rapozo, Somei Ura, Deise Ap. dos Santos Godoy, Raul Neirão Fleury

Instituto Lauro de Souza Lima

End. Rod. Cte. João Ribeiro de Barros, km 225/226, Bauru – SP, CEP: 17034-971, Cx. Postal: 3021, Fone: (14) 221 5900, FAX: (14) 221 5914, E-mail: [ensino@ils.br](mailto:ensino@ils.br).

AFS, 45 anos, masculino, branco, procedente de Bauru – SP.

HMA: Atendido neste Instituto em 10/77, com lesões cutâneas características de hanseníase virchowiana (infiltração difusa, sobre a qual se notavam placas, pápulas e tubérculos, alguns de um tom ferruginoso),

sobrancelhas estavam preservadas, baciloscopia eram de 5+ com até 18% de bacilos íntegros, histologia com aspecto típico de hanseníase virchowiana, reação de Mitsuda negativa. Iniciou tratamento com rifampicina e sulfona durante 6 meses, após este período, continuou tratamento monoterápico com sulfona. Teve vários surtos de eritema nodoso hanseniano, neurites e artrites. Foi medicado com talidomida e/ou corticosteróides para controle das manifestações reacionais em vários momentos.

Última baciloscopia positiva foi em 10/84, 1+, mas até 10/88 apresentava manifestações reacionais (artrite, neurite).

Fez uso de sulfona regularmente por quatorze anos, depois de forma irregular (2 – 3 vezes/ semana) e há seis anos não usa sulfona. Em 1989, era considerado branqueado (sem lesões cutâneas ativas, baciloscopia negativa). Neste ano, foi submetido à imunoterapia (vacina do Convit).

Há um mês e meio (setembro de 2001), notou manchas avermelhadas praticamente assintomáticas no tronco. Ao exame apresentava lesões cicatriciais hipertróficas em regiões escapulares (cicatriz da vacina), lesões cicatriciais e anodérmicas em face posterior de braços, antebraços, pernas e joelhos. Placas eritematosas, algumas bem delimitadas outras nem tanto, número moderado em tronco, membros e lesões papulares eritematopigmentares esparsas em tronco e membros. Na face há placa eritematosa não bem delimitada na frente e há também eritema malar. Nas coxas há laivos ferruginosos. Índice baciloscópico (IB: 1,6). A histopatologia da lesão eritematosa, em placa bem delimitada, mostra focos inflamatórios de pequena moderada extensão em todos os níveis do derma, constituídos por histiócitos modificados, com núcleos vesiculosos e citoplasma finamente vacuolado entremeados por difuso infiltrado linfocitário, delaminação do perinervo e penetração do endonervo por células inflamatórias. Baciloscopia 5+ (presença de bacilos típicos).

AP: etilista, teve vários episódios de gastrite alcoólica e síndrome de abstinência. Há cinco anos não bebe (sic); diabetes mellitus diagnosticado há 5 anos; pneumonia há 1 ano.

### PCA 81

#### HANSENÍASE VIRCHOWIANA – MANIFESTAÇÃO CLÍNICA ATÍPICA

Ana Paula de Almeida Costa, Jane Ventury Leal, Leandro Ourives Neves, Maria Alice Ribeiro Ozório, Moisés Salgado Pedrosa, Roberta Leste Motta, Rozana Castorina da Silva, Sandra Lyon

Fundação Hospitalar do Estado de Minas Gerais, Hospital Eduardo de Menezes, Centro Colaborador de Referência em Dermatologia Sanitária.

Av. Doutor Cristiano Rezende 2213, Bonsucesso, Belo Horizonte, MG

A Hanseníase é uma doença infecto-contagiosa, curável, de evolução crônica causada pelo *Mycobacterium leprae*, endêmica em várias regiões do mundo e se caracteriza principalmente por manifestações dermatológicas e neurológicas atingindo nervos periféricos podendo levar a deformidades e mutilações. Uma das formas clínicas de hanseníase é a forma virchowiana que apresenta como característica numerosas lesões eritemato-violáceas, infiltradas, brilhantes, coalescentes e mal definidas. Pode ocorrer infiltração difusa com formação de tubérculos e nódulos ocasionando a perda definitiva de pêlos. É uma doença sistêmica com manifestações viscerais importantes, os distúrbios sensitivos cutâneos e o acometimento de troncos nervosos estão presentes, mas não são tão precoces e marcantes como nas lesões tuberculóides e dimorfas. Os autores apresentam o caso de um paciente, 29 anos, com uma lesão eritemato-infiltrada com o centro necrótico, perifolicular localizada em face médio-anterior de coxa esquerda há alguns meses que evoluiu com lesões satélites com o mesmo aspecto e também lesões similares em membro inferior direito e membro superior direito. Queixava-se de prurido nas lesões. Havia feito uso de medicamentos tópicos sem melhora clínica. Negava alteração de sensibilidade, dormência, perda de força muscular ou ainda perda de pêlos ou sinais de infiltração. O exame histopatológico mostrou a epiderme com acantose irregular e hiperqueratose, a derme com denso infiltrado inflamatório linfo-plasmo-histiocitário rico em células espumosas (células de Virchow) de distribuição perivascular, perineural e perianexial. A pesquisa de BAAR (WADE) foi positiva com grande número de bactérias intracelulares formando globias. O diagnóstico histopatológico foi de Hanseníase Virchowiana. No retorno o paciente já apresentava em mão E uma lesão nodular sugestiva de hansenoma. O índice baciloscópio foi de 4.2. O tratamento instituído foi a poliquimioterapia multibacilar.

**Motivo da apresentação:** Manifestação clínica atípica de uma doença endêmica.

### PCA 82

#### HANSENÍASE VIRCHOWIANA HISTÓIDE

Ana Cláudia Lyon de Moura, Dayse Vidal D'Ávila, Maria Alice Ribeiro Ozório, Moisés Salgado Pedrosa, Paula Pimentel Carvalho, Roberta Leste Motta, Rozana Castorina da Silva, Sandra Lyon

Fundação Hospitalar do Estado de Minas Gerais, Hospital Eduardo de Menezes, Centro Colaborador de Referência em Dermatologia Sanitária.

Av. Doutor Cristiano Rezende 2213, Bonsucesso, Belo Horizonte, MG

A Hanseníase é uma doença infecto-parasitária, curável, de evolução crônica causada pelo *Mycobacterium leprae*, endêmica em várias regiões do mundo e se caracteriza principalmente por manifestações dermatológicas e neurológicas que podem acarretar deformidades e mutilações nos portadores da doença. A doença pode se manifestar através de quatro (indefinida, tuberculóide, diformo e virchowiana). A forma virchowiana apresenta ainda diversas variedades de apresentação clínica, dentre elas a variedade históide que se caracteriza por lesões nodulares múltiplas, consistentes, pardacentas semelhantes a quelóides. A hanseníase virchowiana históide é considerada por alguns autores como característica de casos sulfono-resistentes, com reativação da doença, mas existem relatos de casos em pacientes virgens de tratamento. Os autores apresentam caso de paciente, sexo masculino, 39 anos, com história de ter tido o diagnóstico de hanseníase virchowiana em 1992 e ter sido adequadamente tratado por 24 meses com poliquimioterapia multibacilar (janeiro de 1992 a março de 1994) sem nenhuma reação hanseniana durante o tratamento e com alta por cura. Conforme relatório médico paciente iniciou o tratamento com índice baciloscópico (IB):5) e recebeu alta com IB: 3,75. Apareceu com lesões nodulares, consistentes, cor da pele, difusas em toda a superfície corporal, com seis meses de evolução, sete anos após o tratamento inicial. Realizado novamente IB: 6. Ao exame histopatológico, a epiderme evidenciou área de atrofia com retificação das cristas interpapilares, a derme mostrou denso infiltrado inflamatório mononuclear rico em histiócitos espumosos (células de Virchow), formando nódulo subepidérmico e manguitos perivasculares/perineurais. A pesquisa de BAAR (coloração especial de WADE) foi positiva, com numerosos bacilos intracelulares íntegros e fragmentados formando globais. O diagnóstico clínico e anátomo-patológico foi de Hanseníase Virchowiana Históide. O tratamento proposto foi a repetição da poliquimioterapia multibacilar.

**Motivo da apresentação:** Raridade da patologia e evolução pouco comum em pacientes tratados adequadamente com poliquimioterapia multibacilar.

### PCA 83

#### HANSENÍASE X COLAGENOSE

Ricardo Américo de Araújo Lima; Heitor de Sá Gonçalves; Francisco José D. Banco; Maria Araci P. Aires; Maria Ruth Salgueiro

Centro de Dermatologia Dona Libânia – SESA- CE

Av. Pedro I, 1033 - Centro – Fortaleza - Ce

BBCP, 31 anos, feminino, secretária, natural e procedente de Fortaleza/Ce. Há 16 anos apresentou quadro de artrite em tornozelos, febre, perda de peso, alopecia, e FAN positivo. Nesta época recebeu o diagnós-

tico de Lupus eritematoso sistêmico (LES), iniciando o uso de prednisona. Em outubro de 1996, passou a apresentar hipoestesia em região plantar direita, com progressão lenta. Em agosto de 1998 surgiram placas eritematosas na região torácica anterior, associadas a parestesias e dores nos membros inferiores, sendo feito o diagnóstico clínico de hanseníase, com posterior confirmação histopatológica de MHV, com índice baciloscópico de 5,0. Iniciou esquema poliquimioterapia para multibacilar da OMS, tendo apresentado quadro reacional tipo I, com neurite e edema dos membros superiores e inferiores, seguido de eritrodermia, o que levou à suspensão da Dapsona e da Carbamazepina que a paciente fazia uso. Após melhora do quadro de farmacodermia, foi reintroduzido o esquema PQT/MB, sem intercorrências. Motivo da apresentação: Hanseníase simulando colagenose.

### PCA 84

HEPATITE CRÔNICA GRANULOMATOSA HANSÊNICA X HEPATITE MEDICAMENTOSA: DIFICULDADE DIAGNÓSTICA

Rosa Maria Cordeiro Soubhia; Geysa Canarim; Juliana Caroni Bozola Bosi; Denise Rodrigues; Máisa Zumerli Vasconcelos; Raquel Fukuti; João Roberto Antonio

Faculdade Estadual de Medicina de São José do Rio Preto, Ambulatório de Dermatologia do Hospital de Base, Av. Brigadeiro Faria Lima n.º 5416 São José do Rio Preto - Brasil.

RMS, 51 anos, casado, motorista, natural de Jales e procedente de São José do Rio Preto. Paciente com diagnóstico de Hanseníase Virchowiana há 7 meses com baciloscopia 2+, em tratamento com PQT-MB, evoluiu após sexta dose com adinamia, icterícia, emagrecimento de 21 kg associado a elevação das enzimas hepáticas (TGO= 86 U/L; TGP= 93 U/L) e anemia (Ht= 25,2 %; Hb= 7,9 g/100ml). Com hipótese diagnóstica de Hepatite Medicamentosa foi optado pela suspensão da Dapsona e da Rifampicina e manutenção da Clofazimina 50 mg/dia. Encaminhado para a Gastroenterologia, que solicitou ultrassom, TC de abdômen, endoscopia digestiva alta, sorologias para hepatite B e C, alfa fetoproteína e ceruloplasmina; todos normais. Encaminhado a Hematologia com hipótese diagnóstica de anemia hemolítica medicamentosa. Foi solicitado Coombs direto e indireto, eletroforese de hemoglobina e reticulócitos; todos normais. Após dois meses em uso de monoterapia com Clofazimina (50mg/dia), não apresentou mudança do quadro clínico e dos níveis das enzimas hepáticas. Introduzido esquema alternativo com Minociclina 100mg/dia, Ofloxacina 400mg/dia e suspenso a Clofazimina por um mês, sem melhora

clínica e laboratorial. Tendo em vista esse quadro, foi suspensa toda terapêutica, realizada biópsia hepática percutânea, sendo compatível com hepatite crônica granulomatosa de etiologia Hansênica, BAAR positivo. Evoluiu com normalização das enzimas hepáticas sendo reintroduzida terapia alternativa com Minociclina 100mg/dia, Ofloxacina 400mg/dia, Clofazimina 50mg/dia com monitorização da função hepática semanalmente. MOTIVO DA APRESENTAÇÃO: Dificuldade do diagnóstico diferencial entre hepatite crônica Hansênica e hepatite medicamentosa em paciente com Hanseníase Virchowiana em tratamento com PQT.

### PCA 85

HEPATITIS B AND C INFECTION AMONG LEPROSY PATIENTS ATTENDING THE SANATORIUM OF FONTILLES (SPAIN)

P. Torres<sup>1</sup>, J.R. Gomez<sup>1</sup>, J.J. Camarena<sup>2</sup>, J.M. Nogueira<sup>2</sup>, J.C. Navarro<sup>2</sup>

<sup>1</sup>Sanatorium San Francisco de Borja, Fontilles; <sup>2</sup> Servicio de Microbiología, Hospital Universitario Dr Peset.

A possible association between infection by hepatitis viruses B (HBV) and C (HCV) and leprosy has been proposed. Hepatitis B (HBV) and hepatitis C (HCV) viruses are transmitted by blood (transfusions, parenteral injections) possibly sexual contacts and probably other unknown routes. They can cause chronic liver disease. Populations with increased risk of these viral infections, especially patients with hemophilia and on hemodialysis have been identified. Patients with leprosy possibly also form a high risk group because of skin lesions, blood transfusions and confinement in institutions during prolonged periods of time. Some consider that the 2 polar forms of leprosy (tuberculoid and lepromatous) provide a model of interaction between cellular immunity and the hepatitis viruses.

In this study, the distribution of HBV and HCV virus markers were evaluated in 214 leprosy patients mostly long term institutionalised in the Sanatorium of Fontilles and compared with matched controls, using the same protocols required for screening of blood donors. Initially, two third generation microparticle enzyme immunoassays and positive results were confirmed by PCR methods.

The HBsAg and HCV positivity rates were 6% and 35% respectively, significantly higher than in the corresponding control groups (2% and 3.5%). The influence of possible risk factors (blood transfusion, confinement in leprosaria during prolonged periods of time, open skin lesions etc..) on this group of patients is discussed.

### PCA 86

#### HEREDITARY NEUROPATHY MISDIAGNOSED AS LEPROSY

M. Patricia Joyce and David M. Scollard

National Hansen's Disease Programs, 1770 Physicians Park Drive, Baton Rouge, LA, 70816, USA.

Hereditary neuropathies (HN) comprise a group of syndromes which may present early in life with various symptoms, including decreased or absent sensation in extremities. Persons affected suffer repeated trauma to hands and feet, resulting in neuropathic sequelae including ulcerations, fractures, osteomyelitis, and disabling deformities. Despite a lack of rash, these disorders may be confused with leprosy, particularly the paucibacillary or neuritic forms. Several family cohorts have been evaluated at NHDP for suspected leprosy but finally diagnosed with HN.

Two siblings in one family from Mississippi were admitted in the 1960's with "bacillary negative" leprosy and treated without improvement in neuropathy. More recently we evaluated a family whose index case is a 14 year old boy from Mexico with severe neuropathic deformities. Extensive evaluation showed no evidence of leprosy, but a severe end stage peripheral neuropathy involving all extremities, with minimal central disease. Nerve biopsy revealed almost complete loss of myelinated fibers and endoneurial fibrosis. Nerve conduction studies revealed severe demyelinating disease. The patient and two other siblings appear by history to have HN, with two other siblings unaffected (as are four other half-siblings). The patient's mother was studied and appeared unaffected.

Neuropathies other than leprosy can be confusing, especially in a young patient lacking skin rash.

### PCA 87

#### HEREDITARY SENSITIVE AUTONOMIC NEUROPATHY TYPE I (HSAN-1) AS A DIFFERENTIAL DIAGNOSIS FROM LEPROSY

Stravogiannis A., Miron, B.G., Stump, G.V., Cezar, L.T.S., Stump, PRNAG, Mariano, LHSC

Instituto Lauro de Souza Lima, CP 3031, Bauru - SP, Brasil, CEP 17034-971

**Aims:** Clinical features' comparison between HSAN I and Leprosy.

**Methods:** Clinical, neurological and psychological assessment of four patients with HSAN I, initially diagnosed and treated as Leprosy carriers and regularly accompanied for over 23 years. The patients were two sisters, whose parents were first degree cousins, and two brothers. Their ages ranged from 42 to 50 years. Tactile (Semmes-Weinstein's monofilaments),

painful, thermal and vibratory sensibilities have been mapped.

**Results:** Disease initiation began in the 2nd decade of life. Inferior limbs have been more precocious and seriously affected than the superior ones, with symmetrical sensitive deficits. Anhidrosis, leading to skin fissures, and cold extremities denoted autonomic neuronal damage. Plantar pressure ulcers and osteomyelitis had developed, resulting in amputations and osteolysis. The patients didn't present any motor impairment such as amiotrophy; neither the central nervous system nor other non-neural tissues have been affected. The interoceptive sensibility has been preserved. One of the sisters and one of the brothers have presented asymmetric sensory hearing loss, smaller intellectual level and a higher number of disabilities.

**Conclusion:** The clinical resemblance to Leprosy, including sensitive deficits and complications such as amputations, may underestimate HSAN I's prevalence; many carriers may still be managed as lepromatous patients. We can exclude the diagnosis of leprosy from HSAN I by the absence of amiotrophy and claw hands and claw feet.

### PCA 88

#### HETEROGENOUS HISTOPATHOLOGICAL PRESENTATION OF TWO MORPHOLOGICALLY DIFFERENT SKIN LESIONS IN BORDERLINE LEPROSY

Sunila Anbarasu, C.K. Job, S. George, S.M. Chandy  
Christian Medical College Hospital, Vellore-632004, Vellore District, Tamilnadu, India.

Borderline leprosy is immunologically unstable and tends to downgrade towards lepromatous end of the spectrum especially if left untreated or upgrade towards the tuberculoid end of the spectrum with or without treatment. The skin histopathology plays a major role to appreciate the shift in the classification of leprosy and the histopathology varies in morphologically different skin lesions. Twenty untreated borderline leprosy patients with two morphologically different lesions were chosen. After clinical assessment they were classified according to Ridley-Jopling classification. They were subjected to bacteriological and histopathological examination. Lepromin test was done in all cases. Nine patients (45%) showed different histopathological features in the two lesions and four patients (20%) showed histologically similar features but with marked difference in the intensity of granuloma. Seven patients (35%) showed identical histopathological features. This study confirms that morphologically different skin lesions may show different histopathological features. The interpretation and the significance of the observations will be discussed.

### PCA 89

#### HISTOLOGICAL STUDY OF HYPOAESTHESIC SKIN AREA IN PRIMARY NEURITIC LEPROSY

Lais Abreu Menicucci<sup>1</sup>, Alice Miranda<sup>1,2</sup>, José Augusto da Costa Nery<sup>1</sup> e Euzenir Nunes Sarno<sup>1</sup>

Leprosy Laboratory, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

The characteristic clinical skin lesion are absent in primary neuritic leprosy (PNL). Nevertheless, poor delimited hypoaesthetic areas are often found on clinical examination. Few data are available concerning the histological changes in this altered skin.

In this preliminary study we attempt to define the modifications in biopsies taken from apparently normal skin of 33 clinically diagnosed PNL patients showing sensory deficit.

Histological changes due to leprosy were seen in 21,2% of the patients, consisting in borderline tuberculoid form (4 cases) and the indetermined form (3 cases). 36,3% of the patients showed mild non-specific mononuclear cell infiltrates around blood vessels within papillary and reticular dermis and 42,4% showed no significant lesion.

Our results suggest that not all patients with PNL are similar, but the histological examination of skin can disclose early leprosy cases and anticipate the specific therapy. Further, in some cases, the nerve biopsy could be postponed.

We intend to extend this work by using immunohistochemical methods to show the presence of *M. leprae* antigens in non-conclusive cases to further improve the diagnosis of leprosy.

### PCA 90

#### HISTOLOGY OF NERVE BIOPSIES IN LEPROSY PATIENTS PRESENTING NEUROLOGIC RELAPSE LONG TERM AFTER COMPLETION OF TREATMENT

Yohannes Negesse

Armauer Hansen Research Institute (AHRI) and All Africa Leprosy and Tuberculosis Training and Rehabilitation Center (ALERT). P.O.BOX 1005, Addis Ababa, Ethiopia.

**Introduction:** Although the peripheral nerves are well recognized to be the seat in leprosy, decisions regarding diagnosis and therapy are largely based on skin manifestations. Our study is intended to evaluate the histologic findings of nerve biopsies from patients considered clinically as relapse.

**Materials and Methods:** From January 1990 to December 1998, nerve biopsies (cutaneous branch of the radial nerve or the sural nerve) were taken from

82 patients diagnosed clinically as neurological relapse two years or more after completion of Multidrug Therapy (Rifampicin, Clofazimine and DDS).

We have compiled the original classification of these patients and the histologic findings.

**Results:** The results are summarized in the following table:

Histologic findings	Originally pauci-bacillary, n/37 pts	Originally multi-bacillary, n 21 pts	Originally unknown Classification, n 24 pts	TOTAL n 82 pts
Lymphohistiocytic infiltrate	9/37 24%	6/21 28%	11/24 46%	32 %
Multibacillary Leprosy neuritis	0/37 0%	0/21 0%	1/24 4%	1%
Tuberculoid granuloma	8/37 22%	0/21 0%	0/24 0%	10%
Vacuolated macrophages infiltrate	1/37 3%	7/21 33%	1/24 4%	11%
Fibrotic nerve	19/37 51%	8/21 39%	11/24 46%	46%

**Discussion:** Bacteriological relapse may be evoked in only 1 % of all the patients.

The vacuolated macrophages infiltrate and the fibrotic change may indicate that the healing and scarring processes may cause clinical nerve function alteration.

The tuberculoid granuloma raises the problem of differential diagnosis between relapse and late reaction.

The diffuse lymphohistiocytic infiltrate without detectable bacilli may indicate the mechanism of nerve damage outside the classical episodes of reaction and may be an explanation of the concept of "silently arising clinical neuritis" (without episodes of reaction).

Defining relapse for MDT re-treatment purpose has to be reconsidered.

### PCA 91

#### HISTOLOGY OF SKIN BIOPSIES IN LEPROSY PATIENTS PRESENTING NEW LESIONS LONG TERM AFTER COMPLETION OF TREATMENT

Yohannes Negesse

Armauer Hansen Research Institute (AHRI) and All Africa Leprosy and TB Rehabilitation & Training Center (ALERT), P.O.Box 1005, Addis Ababa, Ethiopia.

**Introduction:** New skin lesions are considered as sign of relapse in leprosy. Histologic finding is also taken as the basis to diagnose relapse. Our study is intended to assess the histology of new lesions.

**Materials and Methods:** From January 1990 to December 2000, skin biopsies were taken from 238 patients presenting "new" lesions one year or more after completion of MDT(Rifampicin, Clofazimine, DDS). We have compiled the histologic findings and the original classification of these patients.

**Results:** The results are summarized in the following table:

Histological findings	Pre-treatment		Pre-treatment		Pre-treatment		Total
	Paucibacillary	#/100	Multibacillary	#/100	Unknown	#/50	
Perivascular lymphohistiocytic infiltrate	33/100	33%	25/100	25%	7/50	4%	64%
Indeterminate pattern	41/100	41%	17/100	17%	10/50	11%	32%
Reproducible pattern	2/100	2%	33/100	33%	4/50	8%	38%
Vacuolated cells infiltrate	4/100	4%	32/100	32%	1/50	2%	36%
Tubercloid granuloma	24/100	24%	13/100	13%	7/50	14%	48%

**Discussion:** 1-Bacteriological relapse may be envisaged in 8% of the cases.

2-The tuberculoid granuloma found in 18% of all the patients raises the problem of relapse or late reaction

3- The histological features of perivascular infiltrate, indeterminate pattern and vacuolated macrophages infiltrate raise the possibility of persisting inflammatory reaction in leprosy maintained by dead bacilli.

4-The concept of "new" lesions on clinical assessment and the histological examination have their own limitations in allowing taking decision for re-treating patients.

## PCA 92

### HISTOPATHOLOGICAL STUDY OF NERVE BIOPSIES IN PATIENTS SUSPECTED CLINICALLY PRESENTING PURE NEURITIC LEPROSY.

Yohannes Negesse

Armauer Hansen Research Institute (AHRI) and All Africa Leprosy and TB Rehabilitation and Training Center (ALERT), P.O. BOX: 1005, Addis Ababa, Ethiopia, E-mail: [ahri@telecom.net.et](mailto:ahri@telecom.net.et)

**Introduction:** Primary neuritic leprosy is defined as leprosy neuritis with no visible skin lesions and skin smears negative for AFB. Our study is intended to see the histological changes in the nerve of patients suspected clinically presenting as pure neuritic leprosy.

**Materials and Methods:** During the study period, January 1993 to December 2000, two hundred and twenty patients, suspected clinically to present pure neuritic leprosy, were sent from ALERT to AHRI for nerve biopsy and histological examination.

The biopsied nerves were the cutaneous branch of the radial nerve or the sural nerve. Fascicular biopsies were taken and processed routinely for histological examination. Systematic tissue Ziehl-Neelson staining was done for all the biopsies.

The demographic data and type of observed lesions of all the patients were compiled.

**Results:** There were 134 males (61%) and 86 females (39%). Fifty six percent of the patients were between the ages of 20 years and 50 years.

The histological finding was as follow: lymphohistiocytic infiltrate with high BI was found in 40 patients (18%); tuberculoid granuloma in 11 cases (5%); fibrotic change and lymphohistiocytic infiltrate in 102 patients (47%); foamy macrophages infiltrate in 7 cases (3%); normal in 60 patients (27%).

**Conclusion:** 1-The normal biopsies may indicate that the clinical manifestations were caused by other conditions or that the small nerve biopsies may not be representative of the nerves lesion.

2-The high male to female ratio and the age distribution of the patients correlate to data of previous studies on pure neuritic leprosy.

3-The classification of pure leprosy neuritis for practical purpose seems to be better accommodated into paucibacillary and multibacillary leprosy neuritis, than tuberculoid and lepromatous leprosy since only in 5% of the cases typical tuberculoid granulomatous reaction was found and typical lepromatous type lesion as in skin lesion was not found.

4-For treatment purpose the problem of classification is raised: long term treatment for the multibacillary lesions and short regimen for the paucibacillary?.

5-It seems that at the time when patients seek for medical care advanced nerve lesions have already occurred and the presence of large foamy macrophages without detectable bacilli may indicate that some multibacillary patients can possibly clear the bacilli but the inflammatory reaction triggered by the dead bacilli will continue to damage the nerve structures.

6-The appropriateness of only antibacillary treatment in pure neuritic leprosy is also debatable.

## PCA 93

### HISTOPATHOLOGICAL STUDY OF SKIN BIOPSIES FROM LEPROSY PATIENTS PRESENTING "NEW" SKIN LESIONS LONG TERM AFTER COMPLETION OF MULTIDRUG THERAPY

Yohannes Negesse

Armauer Hansen Research Institute (AHRI) and All Africa Leprosy and TB Rehabilitation & Training Center (ALERT), P.O.Box 1005, Addis Ababa, Ethiopia, E-mail: [ahri@telecom.net.et](mailto:ahri@telecom.net.et)

**Introduction:** Leprosy is essentially a disease of the skin and peripheral nerves. Skin lesions are the basis for the classification and for the treatment purpose of leprosy.

Criteria for relapse regarding skin manifestations have been more or less clearly defined and histological examination is also one diagnostic method of relapse.

Our study is intended to assess the contributions of histological examinations in the work-up of patients presenting "new" lesions one year or later after completion of WHO MDT. We think also that our study will contribute towards better understanding of the pathogenesis of *M. leprae* infection disease.

**Materials and Methods:** Our retrospective study covers the period from January 1990 to December 2000. We have compiled the initial classification and histological findings of skin biopsies of all patients sent from ALERT to AHRI as presenting new skin lesions one year or more after completion of WHO MDT. Regarding the initial classification patients were grouped into paucibacillary and lepromatous.

**Results:** During the study period skin biopsies were taken from 238 such patients. For these 238 patients the pre-treatment classification was as follow: 100 patients were classified as paucibacillary, 80 as lepromatous and the initial classification was not found for 58 patients.

The histological findings were as follow:

Histological Findings	Pre-treatment Paucibacillary, #100		Pre-treatment Lepromatous, #80		Pre-treatment Unknown #58		Total #238
	#	%	#	%	#	%	
Perivascular lympho-histiocytic infiltrate	33/100	33%	25/80	31%	27/58	47%	34%
Indeterminate pattern	43/100	43%	17/80	21%	18/58	31%	32%
Lepromatous pattern	2/100	2%	13/80	16%	4/58	7%	8%
Vacuolated cells infiltrate	4/100	4%	12/80	15%	1/58	2%	4%
Tuberculoid granuloma	23/100	23%	13/80	16%	7/58	12%	18%

#### Discussion:

1-Histologically detected possible bacteriological relapse (re-infection or bacilli starting to multiply again) may be envisaged in 8% of all patients.

2-The tuberculoid granulomatous reaction found in the patients with a pre-treatment classification of paucibacillary and as well in the intially lepromatous patients raises the difficult differential diagnosis between relapse and reaction.

3- The histological features of perivascular infiltrate, indeterminate pattern and vacuolated macrophages infiltrate raise the possibility of continuous inflammatory reaction in leprosy.

4-The concept of "new" lesions on clinical assessment and the histological examination have their own limitations in allowing taking decision for re-treating patients.

5-In general the concept of relapse in leprosy considered as re-infection or bacilli starting to multiply has to be taken with caution.

#### PCA 94

HIV E HANSENÍASE: ASPECTOS CLÍNICOS E TERAPÊUTICOS DE 05 CASOS ACOMPANHADOS NO HC DA UFMG

Ana Regina Coelho Andrade; Andréa Machado Coelho Ramos; Dalton Nogueira Moreira; Jacqueline G. Ferreira de Oliveira; Marcelo Grossi Araújo; Maria Ester Massara Café; Mark Drew Crossland Guimarães

Hospital das Clínicas da Universidade Federal de Minas Gerais/ Centro de referência e treinamento em doenças infecciosas e parasitárias Orestes Diniz

Alameda Álvaro Celso 55 Santa Efigênia Belo Horizonte MG CEP 30150-260

A co-infecção HIV/hanseníase tem motivado muitos trabalhos e várias hipóteses têm sido levantadas em relação a possíveis repercussões na epidemiologia da hanseníase e na evolução clínica dos casos. A letalidade era elevada nos primeiros anos da epidemia do HIV, dificultando o seguimento dos pacientes. As novas modalidades de tratamento anti-retroviral combinado tem melhorado a sobrevida dos pacientes, e permitido seguimento mais longo dos casos de co-infecção.

Apresenta-se casuística de 05 casos acompanhados nos serviços de Dermatologia do HC-UFMG e CRT – DIP Orestes Diniz. Ressalta-se o diagnóstico de hanseníase borderline- tuberculóide em reação como primeira manifestação da hanseníase em 03 casos, nos quais o quadro eclodiu poucos meses após o início da terapia anti-retroviral combinada. Nestes, observou-se a concomitância da recuperação na contagem de CD4 com a reação. Discute-se se a mudança na condição imunológica dos casos seria fator favorecedor do aparecimento da reação reversa e se esses quadros reacionais seriam parte da nosologia que compõe a Síndrome de Recuperação Imunológica descrita desde a introdução do tratamento anti-retroviral combinado.

A resposta clínica à poliquimioterapia e aos corticosteróides aparentemente tem sido semelhante àquela observada nos pacientes imunologicamente competentes.

#### PCA 95

HYPERGLYCAEMIA IN LEPROSY AN OBSERVATION FROM 1993 TO 2001

Rajenderen, M., Suri Babu, C. S. S., Ravi, P., Narasimha Moorthy, P., Sathish Kumar, E.

Central Leprosy Teaching & Research Institute, Tirumani, Chengalpattu – 603 001, Tamil Nadu, India.

Changes in human behavior and life style over the last century have been resulted in a dramatic increase in the incidence of Hyperglycaemic status (or) Diabetic World wide. The associated conditions are Diabetes and metabolic syndrome. The global figure of 151 million people with Hyperglycaemic status currently estimated in the year 2000, most cases might

be of Metabolic syndrome and it is multi-factorial. Especially in Asia 84.5 million Hyperglycaemic patients are distributed.

The important debate today is on the reasons for Hyperglycaemic status in leprosy. The present observations are made from the Central Leprosy Teaching & Research Institute's, in-patients admitted in wards. Out of 7145 patients Multi Bacillary (MB) and Pauci Bacillary (PB) admitted during the year march 1993 to December 2001, 2358 patients were referred to Biochemistry Laboratory for various Bio chemical investigations, Among 1670 patients with and without anti-diabetic drugs were investigated for Blood glucose level, either during fasting or after food. (including Post Prandial samples) Blood glucose levels in short ranges will be tabulated in percentage, age, sex wise distribution and presented for discussion.

### PCA 96

#### INFILTRADO LINFOCÍTICO SIMULANDO RECIDIVA EM HANSENÍASE – RELATO DE CASO

Hercules, F.M; Stenzel, D; Britto, R. A. S; Souza, M.A.J; Abulafia, A L; Oliveira, M.L.W.D.R.

Centro Municipal de Saúde de Duque de Caxias

O Infiltrado Linfocítico caracteriza-se por uma ou mais placas ou nódulos eritematosos, na face, pescoço, tronco superior, ou braços, sendo mais incidente nos adultos. Alguns consideram variante do Lúpus Eritematoso, ou menos comumente, Erupção Lumínica, Hiperplasia Linfóide Cutânea ou Linfoma Linfocítico. As opções de tratamento são: corticóide tóxico, antimalárico e talidomida. Paciente, fem, 51 anos, parda, RJ, solteira, do lar. Início em 1994 com 4 lesões eritemato-infiltradas, tricoftóides, no pescoço, cotovelo direito, punho esquerdo e dorso. A baciloscopia foi negativa e o grau de incapacidade zero. Biopsia cutânea evidenciou MHT. Iniciado tratamento com PQT PB, tendo evoluído com diversos episódios reacionais tipo reação reversa (RR), tratados com corticóide. Em 09/1997 foi rebiopsiada a lesão, sendo compatível com MHI, e então diagnosticado recidiva e reiniciado PQT PB sem DDS (suspeita de alergia a sulfas). Novamente cumpriu as 6 doses com vários episódios de RR. Em 04/ 1999 nova biopsia cutânea mostrou infiltrado linfocítico. Desde então, associou-se talidomida à prednisona, sem impedir o surgimento de novas lesões. Em 01/ 2001 foi internada no HUPE para esclarecimento do quadro, onde nova biopsia indicou Infiltrado Linfocítico de Jessner. Após exames de rotina, iniciou cloroquina 250mg/dia; entretanto após 5 meses, foi suspensa devido a edema de mácula. Em 12/2001, a cloroquina foi substituída pelo uso diário de DDS, sem melhora até o momento. O diagnóstico de recidiva paucibacilar merece muita atenção, uma vez que não existem critérios laboratoriais confirmatórios

e diferenciação segura de reação na biópsia. Este caso evidencia uma situação onde a Histopatologia foi fundamental para afastar recidiva e diagnosticar Infiltrado Linfocítico.

### PCA 97

#### INITIAL NEUROLOGICAL EXAMINATION IN MULTIBACILLARY LEPROSY: CORRELATION WITH DISABILITIES AT DIAGNOSIS AND OVERT NEURITIS

Pimentel, Maria Inês Fernandes; Nery, José Augusto da Costa; Borges, Esther; Gonçalves, Rosângela Rolo; Sarmo, Euzenir Nunes

Laboratório de Hanseníase, Fundação Oswaldo Cruz. Avenida Brasil no. 4365 – Mangueiras – Rio de Janeiro – RJ - CEP: 21045 – 900.

One hundred and three patients with multibacillary forms of leprosy (18.4% BB, 47.6% BL, and 34% LL) were studied, aiming to correlate the presence of thickened and/or painful peripheral nerves with physical disabilities at the initial examination, considering the disability grade before treatment (DGBT), as well as to correlate with the development of overt neuritis episodes, during and after multibacillary multidrug therapy. The detection of affected peripheral nerves at diagnosis correlated significantly ( $p < 0.005$ ) with the occurrence of physical disabilities (DGBT  $> 0$ ). Also, it correlated significantly with the development of overt neuritis in the follow-up (average of 64.6 months from diagnosis, during and after multidrug therapy). We can stress the necessity of careful palpation of peripheral nerve trunks in multibacillary patients at the initial examination, in order to call attention to physical disabilities already present, and specially to prevent further or worsening of disabilities by careful follow-up of patients at risk of developing overt neuritis.

### PCA 98

#### KNOWLEDGE, ATTITUDE AND PRACTICE QUESTIONNAIRE SURVEY THROUGH FOCUS GROUP DISCUSSION ON LEPROSY, COX'S BAZAR, BANGLADESH

Dr. Aprue Mong, Mr. David Baidya, Mrs. Jayontee Baroi, and Mr. Ananta Chakma, Chittagong leprosy Control project (CLCP),

House # 16, Road # 4, Khulshi, Chittagong 4000, Bangladesh

**Objective:** The main objective was to assess the knowledge and changing attitude and practice towards leprosy patient through focus group discussion, to identify opportunities for intervention and their relative impact due to focus group discussion.

**Study design:** It is an intervention study at Pre-FGD and Post-FGD questionnaire survey. Study subject were randomly selected from rural population and pre and post participants were matched.

**Methods:** Focus group discussion (FGD) conducted by trained Leprosy Control Assistant (LCA) and a group of Health Educator from National Leprosy Coordinating Committee. During the FGD data collection done by asking questionnaire to the participants and socio-demographic characteristics also collected during the discussion.

**Result:** A total of 607 participants in both pre and post focus group discussion, in which 374 (61.6%) male and 233 (38.4%) were female. Pre-FGD participants were 281 and age range from 10 to 80 years mean age 31.81 years and standard deviation 15.6. In Post-FGD group participants were 326, age ranged from 12 to 85 years, mean age 32.85 and standard deviation 15.53.

There are improving of knowledge and practice average 30%, on leprosy disease due to present health education methods, which is highly significant, p value <0.001. But the attitude not much changes as knowledge, risk difference seen average 5% and p value = 0.25. In conclusion knowledge of the community is changing very fast but attitude does not change much.

Leprosy Laboratory – FIOCRUZ- Rio de Janeiro-Brazil

**Introduction:** Several authors have reported inflammatory reactions in patients infected with HIV-1, who were under the first two months of highly active antiretroviral therapy (HAART). This condition may represent progression of previously quiescent infections to symptomatic diseases and is associated with pronounced reductions in plasma HIV-1 viral load and increase CD4 T lymphocyte counts. Clinical presentation is often different from untreated HIV-1 infection probably because of restored immunity. Clinical information: two patients with AIDS and about few weeks of HAART presented ulcerated skin lesion, positive Mitsuda reaction, epithelioid granuloma in the biopsy, CD4 less than 500 cells/mm<sup>3</sup>. One of them were AFB-positive on the smear and on the paraffin-embedded biopsy section (4+), showing a drastic decrease of bacillary load before specific antibiotic therapy and after reversal reaction. The other patient had his diagnosis confirmed with PCR and presented persistent reversal reaction. Comments: Leprosy has long been known to present paradoxical reactions shortly after beginning antimycobacterial therapy. Both patients presented lesion worsening before specific treatment and increased number of CD4 cell counts as a result of the HAART. In addition, they improved with corticotherapy and antimycobacterial therapy.

### PCA 99

#### LEPRA EN LA INFANCIA

Dr. José Luis Gómez

Médico De Planta Del Hospital Nacional "B. Somer", General Rodriguez, Praça De Buenos Aires, Rep. Argentina.

- Definicion
- Características de la lepra em la infância
- Variedades clíncias em la infância (com 6 fotografias)
- Histopatologia de los tipos polares (com 2 fotografias)
- Diagnóstico
- Tratamento
- Referencias.

### PCA 100

#### LEPROSY AND AIDS: REPORT OF TWO CASES IN THE BEGINNING OF HAART AND INFLAMMATORY REACTIONS

Pignataro, P.E.; Nery, J.A.C.; Miranda, A; Santos Rocha, A.; Sales, A. M.

### PCA 101

#### LEPROSY NEURITIS: DEVELOPMENT OF PHYSICAL DISABILITIES IN MULTIBACILLARY LEPROSY PATIENTS THAT INITIATE MDT WITHOUT THEM

Pimentel, Maria Inês Fernandes; Nery, José Augusto da Costa; Borges, Esther; Gonçalves, Rosângela Rolo; Sarno, Euzenir Nunes

Laboratório de Hanseníase, Fundação Oswaldo Cruz. Avenida Brasil no. 4365 – Mangueiras – Rio de Janeiro – RJ - CEP: 21045 – 900.

We studied 45 multibacillary leprosy patients (22.2% BB; 46.7% BL; and 31.1% LL) that initiated multidrug therapy (MDT) without disabilities (disability grade and index before treatment equal to zero), aiming to study the influence of overt neuritis in the development of physical disabilities. They were followed-up during MDT and after treatment, for an average period of 64,6 months from the start of the treatment. The overt neuritis episodes (pain, spontaneous or at palpation, in peripheral nerves) were noted, during and after MDT. Physical disabilities were evaluated at the end of treatment (24 doses) and at the end of the follow-up period through disability grade and index. Nineteen patients presented overt neuritis episodes during follow-up (15 patients while

receiving MDT). There was a significant correlation between the occurrence of overt neuritis during MDT and the presence of disabilities at the end of treatment, by disability grade ( $p = 0,013246$ ) and by disability index ( $p = 0,010989$ ). We found a also significant correlation between the development of overt neuritis during follow-up period and the establishment of physical disabilities at the end of the accompaniment period, evaluated through final disability grade ( $p = 0,022933$ ) and through final disability index ( $p = 0,026420$ ). These data show the importance of neuritis in the induction of disabilities in multibacillary leprosy, suggesting that we must pay attention to its early diagnosis, aiming prompt treatment and adequate physiotherapy.

### PCA 102

#### LESÕES ORAIS NA HANSENÍASE

Ana Líbia Cardozo Pereira; Ana Paula Fucci da Costa Nery; José Augusto da Costa Nery; Maria Leide Wan-del-rey de Oliveira; Tullia Cuzzi Maya; Márcia Ramos e Silva

Hospital Universitário Clementino Fraga Filho-UFRJ. Serviço de Dermatologia

Av. Brigadeiro Trompowsky s/ número- Ilha do Fundão- 5 Andar

As lesões orais na hanseníase são pouco freqüentes, entretanto acredita-se que a sua ocorrência possa ser uma possível fonte de infecção com a presença de bacilos viáveis. No presente trabalho foram estudados 26 pacientes sendo 18 homens e 8 mulheres com idade entre 16 e 71 anos com diagnóstico de hanseníase, virgens de tratamento ou até a segunda dose de tratamento. Os pacientes foram provenientes dos ambulatórios de hanseníase do HUCFF/UFRJ e da FIOCRUZ e submetidos a exame clínico da cavidade oral, biópsia da lesão, caso houvesse, e da mucosa jugal à esquerda onde foi realizado Wade e HE.

Resultados: 11 pacientes foram classificados como MHV, 14 MHB e 1 paciente MHT. O exame clínico da mucosa oral desses pacientes mostrou:

enantema de pilares anteriores - 5/ enantema de úvula - 3/enantema de palato- 2/enantema de mucosa jugal - 3/ exulceração da mucosa jugal -1/exulceração de palato duro - 1/ infiltração do palato - 2/ nódulos no palato - 1. 12 pacientes não apresentavam lesões orais e 4 pacientes tiveram dois tipos de lesões simultaneamente.

No exame histopatológico da mucosa jugal ao HE, 16 pacientes não apresentavam alterações, 10 apresentavam infiltrado inflamatório inespecífico e 3 apenas congestão e ectasia vascular. No Wade todos foram considerados negativos. Já na histopatologia da lesão, todos os pacientes apresentavam anormalidades no HE que variavam de infiltrado inflamatório

inespecífico (3); congestão e ectasia vascular (3) e infiltrado inflamatório com células xantomizadas (2). Na coloração de Wade, 5 pacientes apresentavam positividade, a maioria com lesão no palato.

### PCA 103

#### LESÕES ULCERADAS NA HANSENÍASE

Abulafia-Azulay, Luna.; Baraúna, S.; Bonalumi, A.F.; Leal, F.R.P.C.; Nery, J.A.C.; Kac, B.K.

Instituto de Dermatologia da Santa Casa de Misericórdia do Rio de Janeiro, RJ., Brasil

**Introdução:** A hanseníase é uma doença infecto contagiosa de alta infectividade e baixa patogenicidade mantendo-se em temica no nosso país. Apresenta expressão clínica variada dependendo da resposta imune.

**Material e Métodos:** Foram avaliados pacientes que apresentavam clinicamente lesões ulceradas em varias fases evolutivas da doença: antes, durante e após o tratamento específico com também quadro clínico sugestivo de reação (Tipo 1 ou Tipo 2).

**Resultados:** A involução dos quadros ulcerativos muitas vezes foi devido não só da medicação para estado reacional como também da introdução da poliquinioterapia.

**Conclusão:** As lesões ulceradas representam uma dificuldade diagnostica quanto não interpretadas no contexto do quadro clinico global do paciente, significando muitas vezes conduta terapêutica inadequada.

### PCA 104

#### LEVANTAMENTO DAS DERMATOSES DE INTERESSE SANITÁRIO MAIS FREQUENTES EM REGIÕES CARENTES DO ESTADO DE MINAS GERAIS – ÊNFASE EM HANSENÍASE

Ana Paula de Almeida Costa, Dayse Vidal D'ávila, Jane Ventury Leal, Juliana Fonseca Valadão, Leandro Ourives Neves, Luciana Paione Carvalho, Maria Alice Ribeiro Ozório, Paula Pimentel Carvalho, Moisés Salgado Pedrosa, Raquel Virgínia Rocha Vilela, Roberta Leste Motta, Rozana Castorina da Silva, Sandra Lyon

Fundação Hospitalar do Estado de Minas Gerais, Hospital Eduardo de Menezes, Centro Colaborador de Referência em Dermatologia Sanitária. Av. Dr. Cristiano Rezende 2213, Bonsucesso, Belo Horizonte, MG.

Em 1991 a Organização Mundial de Saúde – OMS propôs a eliminação da Hanseníase como problema de saúde pública do mundo até o ano 2000, com a intenção que até essa data, todos os países endêmicos

alcançassem uma taxa de prevalência de 1/10000 habitantes. A meta proposta, apesar dos esforços, não foi atingida no Estado de Minas Gerais, e o principal fator associado foi a permanência de casos não diagnosticados (permanência oculta), responsável pela manutenção de fontes de contágio na população. Este problema pode estar relacionado a baixa cobertura e a falta de informação da população. Dentre as várias regiões do Estado de Minas Gerais, destacam-se a região do Vale do Jequitinhonha e do Vale do Mucuri pela carência do setor de saúde e conseqüente ineficiente assistência médica a população. Foi devido a essa carência e o contato prévio com as prefeituras de várias cidades dessas regiões que o trabalho de levantamento da prevalência das dermatoses de interesse sanitário com ênfase na Hanseníase pode ser viabilizado. Foram realizados 2 multirões com equipe multiprofissional e interinstitucional composta por 44 pessoas das mais diversas áreas (dermatologistas, oftalmologistas, dentistas, psicólogos, enfermeiros, bioquímicos, veterinários, auxiliares de enfermagem, assistente social, dentre outros). A equipe realizou atendimento durante 3 dias em cada uma das regiões em julho e dezembro de 2001 com avaliação da população com lesões de pele, unhas e couro cabeludo, cadastradas por agentes de saúde. Para cada paciente foi preenchida uma ficha com dados pessoais e sócio econômicos pertinentes ao inquérito epidemiológico. Durante o curto tempo de atendimento no Vale do Jequitinhonha, 4 novos casos diagnosticados em 1330 atendimentos, sendo todos eles no município de Itaobim cuja prevalência da doença era zero até então. Os dados obtidos com relação a hanseníase foram tão positivos que motivaram a continuidade desse trabalho pela equipe com uma periodicidade semestral com expansão para outras regiões já neste ano.

### PCA 105

#### LINFOMA NÃO-HODGKIN SIMULANDO HANSENÍASE VIRCHOWIANA – RELATO DE CASO

Vanessa Barreto Rocha, Marcelo Grossi Araújo, Antônio Carlos Martins Guedes, Saõny Victor de Carvalho, Cláudia de Souza

Serviço de Dermatologia do Hospital das Clínicas – UFMG. Al. Álvaro Celso, 55 – Santa Efigênia – Belo Horizonte – MG. CEP 30150-260. Telefax: (31) 3226-3066

Apresentamos caso de Linfoma não-Hodgkin em que chamamos atenção para o diagnóstico diferencial com formas multibacilares de hanseníase, dificultando principalmente o diagnóstico de campo. Além de achados clínicos passíveis de confusão, a histologia mostrava infiltrado inflamatório perineural.

Relato do Caso: Trata-se de paciente feminina, 28 anos, natural e residente no interior de MG, atendida

pela primeira vez no serviço em setembro de 2000 com relato de ter se mantido hígida até fevereiro, quando iniciou com lesões hipercrômicas no abdome e dorso, assintomáticas, que, após biópsia feita na mesma cidade, foram diagnosticadas como MHI, sendo tratada com PQT II por 6 meses, quando evoluiu com anemia importante, atribuída à hemólise por dapsona, e com “quadro reacional” descrito como edema poliarticular, piora das lesões de pele e surgimento de nódulos cervicais, para o qual iniciou-se prednisona 50 mg/dia. Ao chegar ao ambulatório, apresentava-se com estado geral comprometido, placas ictiosicas e várias lesões esclerodermiformes disseminadas; a face se mostrava infiltrada, de modo marcante os pavilhões auriculares, não se notando madarose. Não apresentava neurite ou espessamento neural, nem alteração de sensibilidade. Apresentava, ainda, linfadenomegalia muito importante em várias cadeias, com linfonodos endurecidos, confluentes, aderidos, esplenomegalia. Adenomegalia hilar importante ao Rx de tórax. Fizemos, assim, biópsia de 5 locais da pele e obtivemos o diagnóstico de linfoma não-Hodgkin. Pesquisa de BAAR em lesões, lóbulos de orelha e cotovelos negativa. Constatada leucemização em mielograma, foi submetida à quimioterapia com regressão importante das lesões e melhora clínica.

### PCA 106

#### LONG STANDING SINGLE LESION ON THE FACE CONSISTENT WITH LEPROSY AND RESPONSIVE TO MULTIDRUG THERAPY

Alba Valéria de Melo<sup>1</sup>, Alice Miranda<sup>1,2</sup>, José Augusto da Costa Nery<sup>1</sup>, Vania Valentim<sup>1</sup> e Ziadir Francisco Coutinho<sup>1</sup>

<sup>1</sup>Leprosy Laboratory, Oswaldo Cruz Foundation, Rio de Janeiro, Brazil

<sup>2</sup>Departament of Pathology and Laboratories, FCM, UERJ, Brazil

Leprosy is a chronic disease, infecting 1.5 millions persons in undeveloped countries. Brazil has about 78 000 patients under multidrug therapy classified according to clinical characteristics and epidemiological data.

However, atypical or incipient presentations occur that do not fulfill the classic criteria for the diagnosis of leprosy and can be of difficult management even for well trained medical teams.

In this retrospective study we present the clinical and histopathological data from six female patients with long standing (2 to 7 years) single lesion located on the face, without clinical and laboratorial conclusive diagnosis. All patients responded to paucibacillary multidrug therapy (MDT/PB or ROM protocols), with clinical subsidence of lesions. Sarcoidosis, Lupus

erythematous-like lesion, Borderline tuberculoid leprosy, Jessner's lymphocytic infiltration and Annular Elastotic Granuloma were the proposed histological differential diagnosis, after excluding infectious diseases.

In conclusion, we suggest that the diagnosis of leprosy should always be questioned in long standing solitary nodule or plaque on the face, mainly in endemic countries like Brazil. In addition, a specific leprosy chemotherapy should be initiated as a therapeutic and diagnostic procedure.

### PCA 107

#### MANIFESTACIONES ORALES DE LA LEPROA

Juan Manuel Núñez Martí, M<sup>a</sup> Dolores Marrero Calvo

Sanatorio San Francisco de Borja. Fontilles.

03791 Fontilles - Vall De Laguart (Alicante), España  
Teléfono: 96 558 33 50. Fax: 96 558 33 76. E-mail: [fontilles.org](mailto:fontilles.org)

La Lepra conlleva una serie de efectos secundarios indeseables, que condicionan la tolerancia y la calidad de vida del paciente. Así, dentro de la esfera orofacial, la boca puede ser asiento de lesiones, que pese a su accesibilidad, pueden por ignorancia pasar desapercibidas y dificultar el adecuado tratamiento de un proceso, que hasta ese momento, había producido pocas lesiones corporales.

Las lesiones en la cavidad oral suelen aparecer en forma lepromatosas y más raramente en dimorfas y tuberculoides. Las lesiones específicas de los lepromatosos a nivel oral son fundamentalmente alteraciones dentales, periodontales, de la mucosa oral y lengua. El diagnóstico precoz de estas lesiones puede disminuir considerablemente el daño oral que esta grave enfermedad puede llegar a causar.

Presentamos el estudio de estas lesiones en un grupo de 76 pacientes con enfermedad de Hansen de la Colonia Sanatorio San Francisco de Borja de Fontilles (Alicante) España.

### PCA 108

#### MANIFESTAÇÕES GENITAIS EM PACIENTE COM HANSENÍASE MULTIBACILAR SOB POLIQUIMIOTERAPIA

Eduardo de Azevedo Nunes; Fanny Xiomara Trigo Gusmán; Profa. Dra. Leontina Margarido Marchese

Departamento de Dermatologia do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo. Rua Enéas de Carvalho, São Paulo –SP – Brasil. Tel/Fax: 011 66841527. E-mail: [edu1000@uol.com.br](mailto:edu1000@uol.com.br)

Os autores relatam características clínico-patológicas de paciente masculino de 37 anos, com hanseníase multibacilar, dimorfa- virchowiana, segundo a classificação de Ridley- Jopling. Apresenta discreto espessamento difuso na pele; rarefação discreta e caudal dos supercílios. Lesões pápulo-nodulares amarelo-acastanhadas, isolados ou confluentes nas orelhas e no corpo peniano, onde a consistência era mais endurecida; e, em menor tamanho e maior número, no abdome. A palpação dos testículos e epidídimo revelou aumento de volume doloroso e bilateral [orquiepididimite], sem sinais de eritema nodoso hansenico, na pele. Anidrose nas extremidades; espessamento neural assimétrico pouco doloroso à palpação. O exame histopatológico dos nódulos os identifica como hansenomas constituídos pelas clássicas células vacuolizadas de Virchow contendo globias bacilares e bacilos isolados. Após 15 meses de multidrogaterapia (rifampicina, dapsona e pirazinamida) o exame histopatológico dos nódulos, inclusive penianos, revelou tecido fibroso com intenso infiltrado de histiócitos com citoplasma vacuolizado, com numerosos bacilos álcool ácido resistentes granulados, por vezes em globias no citoplasma de macrófagos. Discussão: Foi notável que o exame clínico da genitália, diversamente do resto do tegumento, apresentava múltiplas lesões nodulares grandes, amarelo acastanhadas, bem delimitadas, endurecidas no prepúcio. As manifestações genitais hansenicas são observadas numa frequência que varia entre 6 e 12% dos casos de hanseníase em pacientes masculinos, sendo mais prevalentes nos multibacilares {dimorfo-virchowianos e virchowianos}. O doente de hanseníase multibacilar dimorfa-virchowiana, ora em discussão, foi surpreendente pela relativa pobreza de manifestações clínicas cutâneas hansenicas extragenitais e a exuberância das mesmas na genitália, caracterizadas pelos múltiplos hansenomas descritos e orquiepididimite bilateral. Okada e cols, 1978, observou, por microscopia eletrônica, bacilos de Hansen em queratinócitos da epiderme íntegra. Provavelmente, os bacilos que conseguiram atingir as células na zona da membrana basal, através dos desmossomas se espalham; e, podem ser eliminados na camada córnea, mesmo com a pele íntegra. Portanto, é plausível, que os hansenomas ou pele especificamente espessada dos genitais, principalmente após atrito, possam transmitir bacilos de Hansen. Há que se pensar na hanseníase como doença sexualmente transmissível (DST); situação já reconhecido na literatura específica e clássica; e, atualmente relegado a plano secundário provavelmente pela emergência de outras DSTs.

### PCA 109

#### MEDIDA DA ATIVIDADE DA ADENOSINA DEAMINASE NAS DIFERENTES FORMAS CLÍNICAS DA HANSENÍASE

Chubert Bernardo Castro de Sena,\* Gisele Pacheco,\* Mário Rogério Santos,\* Marília Brasil Xavier,\*\* Claudio Guedes Salgado,# e José Luis Martins do Nascimento\*

\*Laboratório de neuroquímica molecular e celular, Universidade Federal do Pará. End. Rua Aaugusto Correa, 1. Campus Guamá. UFPA. 66075-110

\*\*Departamento de saúde comunitária, Universidade do Estado do Pará.

#Laboratório de Dermato-imunologia UEPA/MC, Universidade do Estado do Pará, e URE "Marcello Candia"

**Objetivo:** Padronização da técnica de medida da enzima Adenosina Deaminase (ADA), para servir como um bioindicador nas diferentes formas clínicas de Hanseníase.

**Métodos e Resultados:** A atividade da ADA, em U/L, foi determinada através de método espectrofotométrico, para caracterização da cinética enzimática e de sua atividade em pacientes com hanseníase. A concentração de 1,55mM do substrato (adenosina), mostrou-se mais eficaz em expressar a velocidade máxima da enzima. Os pacientes foram divididos em três grupos: grupo controle (não portadores) e grupos de portadores com e sem espessamento de nervos, sendo estes subdivididos conforme sua classificação (MHI; MHT; MHD e MHV)

**Conclusão:** Nossos resultados indicam que a atividade da ADA está baixa em todas as formas clínicas, exceto a forma dimorfa, quando comparada ao controle e pode ser um bom indicador da resposta imune em pacientes com diferentes formas clínicas da Hanseníase.

U/L	Controle		Sem espessamento neural				Com espessamento neural		
	n	U/L	MHI	MHT	MHD	MHV	MHT	MHD	MHV
U/L	6	4,6	3	5	6	3	3	5	2
		± 1,6	± 2,9	± 3,3	± 6,2	± 2,1	± 2,9	± 4,8	± 3,1
			± 1,1	± 1,1	± 2,5	± 1,2	± 1,2	± 2,3	± 0,3

**Materials and Methods:** This study has included a retrospective analysis of 56 patients with reactional patient condition of a multiform erythema type in patients with leprosy submitted to multibacillar multidrugtherapy (MDT) according to the scheme of the WHO. All those patients who presented this reactional patient condition, whether during the period when they received the PCT or during the observation period after therapeutic discharge, were selected for this study. Sex, age, bacilloscope indices (BI), incapacity degree (ID) as well as the classifications of patients with reference to clinical form, moment the first episode occurred, number of episodes and occurrence of episodes, whether associated or not to other patient conditions.

**Results:** We have observed a predominance of the reactional patient condition of the multiform erythema type in the male sex (87,5%) and in the age group between 20 and 39 years old (55,4%). There has been a tendency of a multiform erythema occurring in association with higher BI indices as well as a decrease of BI after treatment. There has been an improvement in ID, should we compare the initial ID with the final ID (51,8%) degree at the beginning of treatment and 63,4% degree zero at the end of treatment. 76% of the patients presented only one episode of multiform erythema, 40% presented their first episode after medication discharge and 17,9% presented it before having begun therapy (at the moment of diagnosis). 41% of the patients presented multiform erythema in association with nodal erythema, 1,8% presented association with reverse reaction, and 26,8% of patients presented isolated multiform erythema.

**Conclusion:** M.E. episodes were not frequently found in multibacillary patients. However, those episodes are very important for identification of leprosy patients and in several occasions, they are the main reason for patients to seek medical care.

## PCA 110

MULTIFORM ERYTHEMA: RETROSPECTIVE ANALYSIS

Garcia Afonso, M.C.Z.; Sales, A.M.; Coutinho, Z.; Vieira, L.M.M.; Nery, J.A.C.; Gallo, M.E.N.

Leprosy Laboratory – Oswaldo Cruz Institute – FIOCRUZ – Rio de Janeiro – RJ.

**Introduction:** Multiform Erythema (ME) – like lesions are manifestation of a reactional episode in lepromatous patients and can delay its recognition as a leprosy reaction. Its early diagnosis is crucial to present disabilities due to the peripheral neuropathy that complicate these acute inflammatory episodes.

**Objective:** Evaluate the distribution of Multiform Erythema as part of reaction episodes of leprosy.

## PCA 111

*Mycobacterium leprae*-HIV CO-INFECTION: RELEVANT CLINICAL ASPECTS AND PROGRESSION

Gomes, A.P.; Sales, A.M.; Nery, J.A.C.; Sampaio, E.P.; Galhardo, M.C.G.; Sarno, E.N.

**Introduction:** To date, published research regarding *M. leprae*-HIV co-infection has been scarce. Leprosy is endemic in Brazil and HIV infection rates, while, generally speaking, have been kept somewhat under control, require constant vigilance. Even so, co-infection has remained a largely ignored subject.

**Objective:** To evaluate the evolution of leprosy in co-infected HIV patients. Material and Methods: This is a retrospective descriptive case study of 30 patients with *M. leprae*-HIV co-infection that were

treated in 1991 to 2000 at the Leprosy Outpatient Clinic, Oswaldo Cruz Foundation, Rio de Janeiro, R.J., Brazil. Statistical analyses were performed via EPIINFO 2000 (CDC). The Qui-square Test and Fisher Exact Test were also carried out.

**Results:** There was no indication in this study that HIV was a risk factor for the development of the multibacillary forms (60% of the cases under treatment in the clinic were paucibacillary). Reactional episodes occurred in 70% of patients (57.1% had reversal reaction). It can, therefore, be postulated that the capacity for reactivation of the cell-mediated immune response remained strong regardless of existing CD4+ levels. All 30 patients responded satisfactorily to multidrug therapy despite their being co-infected and having an altered immune state (AIDS/HIV). Moreover, no relapses were seen to occur.

**Conclusions:** None of the patients demonstrated an increased susceptibility to *M. leprae* or progression toward a multibacillary or disseminated form of leprosy. In addition, there was likewise no indication of impairment in the immune response to *M. leprae* in spite of the AIDS co-infection.

### PCA 112

NERVE CONDUCTION STUDIES OF MULTIBACILLARY-LEPROSY PATIENTS: ANALYSIS OF 35 PATIENTS AT THE BEGINNING OF MULTIDRUG THERAPY

Patricia S. Penna, Marcia M. R. Jardim, Oswaldo J.M. Nascimento, José A.C. Neri, Anna M. Sales, Euzenir N. Sarno

Fundação Oswaldo Cruz and Dept of Neurology, Universidade Federal Fluminense (UFF), Rio de Janeiro, Brazil.

**Objective:** To observe the frequency of evidences of nerve damage in multibacillary (MB) leprosy patients at the beginning of multidrug therapy (MDT).

**Background:** We did not found at the literature any study that determine how are frequency of peripheral neuropathy at the beginning of MDT in MB patients and when the axonal or demyelinated lesions appear during these treatment.

**Design/method:** We examined 35 patients classified as having the MB form of leprosy. These patients were submitted to clinical and neurological examination followed by nerve conduction studies at the beginning of multidrug therapy. We divided these patients into groups: Group 1 A – Patients with signs and symptoms of peripheral nerve lesion; Group 1 B – Patients without complain of paresthesias or pain, but with signs of peripheral nerve lesion; and Group 2 – Patients without peripheral nerve complaints and without signs. Nerve conduction studies were done according to standard techniques.

**Results:** Out of the 35 multibacillary leprosy patients, 11 (31%) were female and 24 (69%) male. The mean age was 39,5 years. The neurological examination revealed sensory alterations in 22 (66%) cases; motor alterations in 7 (20%) of; and nerve thickness in 19 (54%) patients. Nerve conduction studies (NCS) were normal in only 50% of group 2 patients. Out of the 28 remaining patients only in 1 (3.5%) from group 1A there were findings consistent with purely demyelination with conduction block, without reaction. Most of the patients (62,8%) has purely axonal alterations in NCS and 2 (5,7%) patients have axonal and demyelinating findings in NCS.

**Conclusions:** Leprosy neuropathy in multibacillary patients is typically of the axonal type, and the small fibers are primarily involved, even in most of the patients with no neurological alterations at the beginning of the MDT. Nevertheless, in rare cases we can verify superimposed demyelinating features with conduction block, an alteration frequently observed in demyelinating neuropathies

### PCA 113

NEUROCRIPTOCOSE EM PACIENTES COM HANSENÍASE VIRCHOWIANA

Ana Cláudia Lyon de Moura, Dayse Vidal D'ávila, Jane Ventury Leal, Maria Alice Ribeiro Ozório, Paula Pimentel Carvalho, Raquel Virgínia Rocha Vilela, Roberta Leste Motta, Rosimeire Arcanjo Hosken, Rozana Castorina da Silva, Sandra Lyon

Fundação Hospitalar do Estado de Minas Gerais, Hospital Eduardo de Menezes, Centro Colaborador de Referência em Dermatologia Sanitária. Av. Dr. Cristiano Rezende 2213, Bonsucesso, Belo Horizonte, MG.

A hanseníase é uma doença infecto-contagiosa causada pela *Mycobacterium leprae* que acomete pele e, sobretudo, nervos periféricos, levando a neurites muitas vezes severas. Essas neurites são tratadas durante sua vigência e nos surtos reacionais através da corticoterapia, que pode se prolongar por meses. As reações adversas do uso sistêmico dos corticosteróides tornam-se inevitáveis. Os autores apresentam o caso de um paciente do sexo masculino, 45 anos, encaminhado da cidade de Prata, MG, para tratamento de neurites persistentes, pós tratamento de Hanseníase multibacilar em uso de 80 mg de Prednisona há 2 anos. O paciente relatava que há 1 ano e 6 meses vinha apresentando quadros repetitivos de "abscessos" em cotovelos, drenando secreção espontaneamente, recebeu antibióticos várias vezes, com períodos de melhora e de exacerbação do quadro. Durante a internação, o paciente apresentou cefaléia persistente. O exame neurológico e a tomografia computadorizada de crânio foram normais. O exame micológico direto e a cultura de fungos do líquido cefalorraquiano identificaram a presença de

*Cryptococcus neoformans*. Foi iniciado Anfotericina B, mas o paciente evoluiu para o óbito no 7º dia após o início do tratamento.

**Motivo da apresentação:** alertar para as possíveis complicações com a corticoterapia prolongada em pacientes hansenianos.

### PCA 114

#### NEUROPATIA PERIFÉRICA SENSORIAL CONGÊNITA SIMULANDO HANSENÍASE VIRCHOVIANA

Thomas de Aquino Paulo Filho

Universidade Federal do Rio G. do Norte – Natal – RN – Brasil. [thomasi@uol.com.br](mailto:thomasi@uol.com.br)

Criança de 10 anos do sexo masculino que desde os 5 anos de idade vem apresentando diminuição da acuidade visual com opacificação das córneas, automutilações nas extremidades dos membros com formação de úlceras plantares, destruição da pirâmide nasal, distúrbios de comportamento, anemia crônica e infecções secundárias nas lesões úlcero-tróficas nos membros. Não há relato de casos semelhantes na família.

O autor apresenta este caso clínico raro com todas as suas manifestações clínico-laboratoriais simulando caso de Hanseníase Virchoviana e comenta a dificuldade de abordagem terapêutica neste caso

### PCA 115

#### NUTRIÇÃO E HANSENÍASE

Gubert, Muriel B.; Alvares, Rosicler R.A.

Hospital Universitário de Brasília, UnB- Avenida L2 Sul, Quadra 605 norte- Brasília DF

**Introdução:** Uma alimentação inadequada está relacionada a doenças carenciais<sup>(1)</sup> e em um aspecto mais amplo, a imunidade de um indivíduo é diretamente influenciada pelo seu estado nutricional<sup>(2,3,4)</sup>. Pesquisadores mostraram que a desnutrição protéica está relacionada com alterações na imunidade mediada por células, função fagocítica, atividade sistema complemento, ação das imunoglobulinas secretórias e produção citocinas e citam como nutrientes envolvidos com sistema imune o zinco, selênio, ferro, cobre, Vit. A, Vit. C, Vit. E, Vit. B6 e ácido fólico<sup>(2)</sup>. Estudos mostram, ainda, que a desnutrição protéica afeta mais IMC do que imunidade humoral. Torna-se, portanto, evidente a relação entre Hanseníase e Nutrição.

**Objetivos:** Este trabalho tem como objetivo relacionar Hanseníase e Nutrição. **Metodologia:** Foi feita revisão da literatura entre os anos 1960 a 2000, nos bancos de dados MEDLINE e LILACS.

**Resultados:** Rees (1981) mostra que a desnutrição protéica diminui a resposta mediada por células e aumenta o risco para MH e que em experimentos com ratos (com déficit calórico/protéico) verificava-se a maior disseminação da doença. Existem relatos que na segunda Guerra, em Leprosário na Malásia (com 2500 doentes) submetidos a uma dieta com menos de 700 Kcal/dia houve maior mortalidade (73%) contudo, desapareceram estados reacionais neste período<sup>(5)</sup>. Rao e cols (1986) demonstram que a desnutrição não está relacionada com a doença e sim com a pobreza e privação de comida. Pesquisadores como Rao e Saha (1986; 1987 e 1988), Chattopadhyya e cols (1992); Mennem e cols (1993), Vidal et al (1993) e Foster et al (1988) demonstraram que pacientes de MH tem níveis séricos alterados pra alguns micronutrientes. Em experimentos com ratos, verificou-se que a gordura da dieta relacionada com multiplicação do *M.leprae*<sup>(6)</sup>. Além dos aspectos alimentares levantados, cabe ainda ressaltar a importância dos efeitos adversos da PQT para estes pacientes<sup>(7)</sup>, o que pode levar a um estado de desnutrição, se não controlados.

### PCA 116

#### OCORRÊNCIA DE ERITEMA NODOSO HANSENÍNICO

Lastória, J.C.; Maccharelli, C.A.; Puttinatti, M.S.M.A.

Faculdade de Medicina de Botucatu- UNESP, Depto de Dermatologia.

A evolução crônica da hanseníase em pacientes portadores da forma multibacilar pode ser interrompida por surtos reacionais denominados tipo 2 ou de Eritema Nodoso Hansênico (ENH), principalmente após o início do tratamento. Com o intuito de se observar a ocorrência destes surtos, avaliou-se 40 pacientes multibacilares em tratamento no Ambulatório de Hanseníase da Disciplina de Dermatologia da Faculdade de Medicina de Botucatu- UNESP, no período de 3 anos, sendo 18 da forma dimorfa (D) e 22 da forma virchoviana (V). Observou-se que 18 (45%) pacientes apresentaram surtos de ENH, sendo 3 (7,5%) D e 15 (37,5%) V. Os surtos ocorreram em número de vezes variável de 1 a 8 por paciente, sendo que 8 (44,4%) pacientes apresentaram apenas um surto; 1 (5,5%), 2 surtos e 9 (50%) pacientes mais de 2 surtos; 22 (55%) dos pacientes não apresentaram surtos reacionais. Estes surtos ocorreram entre a 1ª. e a 23ª. dose da PQT, sendo a maior frequência entre a 1ª. e a 12ª. dose, em 8 (22%) pacientes. Observou-se, ainda que 12 (30%) pacientes apresentaram surtos após a alta, com variação de ocorrência de 1 a 52 meses, até o momento, sendo que 5 (12,5%) apresentaram apenas uma vez; 2 (5%) duas vezes e 5 (12,5%) apresentaram mais de dois surtos. Em 2 (5%) dos pacientes o ENH manifestou-se antes mesmo do início do tratamento. Interessante

notar que os pacientes que apresentaram surtos após a alta foram praticamente os mesmos que apresentaram durante o tratamento e, ainda, que em 6 (15%) destes, que não haviam apresentado durante o tratamento, o fizeram a partir do 6.<sup>o</sup> mês após o mesmo, sendo em 3 deles, cerca de 40 meses após a alta. Os autores chamam a atenção para a alta frequência de surtos de ENH e que muitos pacientes continuam a apresentá-los após a alta, ou seja, após o término do tratamento, por longos períodos, além do fato dos mesmos poderem ocorrer, também, após longos períodos após a alta em pacientes que não os apresentaram durante o tratamento.

Houve ou não correlação do número de surtos com o IB, tanto durante o tratamento como após.

### PCA 117

#### OCORRÊNCIA DE HEPATITES B E C EM PACIENTES COM PATOLOGIAS PASSÍVEIS DE TERAPÊUTICA COM IMUNOSSUPRESSORES

Joel Carlos Lastória, Milena Cerchiaro, Fábio C. Iuan, Nadia R. Carvalho

Faculdade de Medicina de Botucatu – UNESP.

Dentre as diversas etiologias da hepatite crônica, temos a infecção pelo vírus da hepatite C (HCV), na qual a cronicidade da infecção é a regra, como sugerido por estudos de hepatite pós-transfusional. A condição de portador assintomático para formas graves da doença pode ser modificada pela terapia com imunossuppressores como, da mesma forma que pela infecção pelo HIV. Esse fato motivou o presente estudo em pacientes com doenças dermatológicas passíveis dessa terapêutica mas que, no entanto, poderiam, eventualmente, serem tratados com medicamentos alternativos, entre as quais a psoríase, a micose fungóide e a hanseníase virchowiana reacional. Como a hepatite C parece ser transmitida de uma forma semelhante à da hepatite B, realizou-se a sorologia para ambas em 54 pacientes portadores dessas doenças dermatológicas. A mesma foi positiva em 4 (7,41%) pacientes. Destes, apenas 1 (1,85%) apresentava o vírus para hepatite C, sendo que os outros 3 (5,56%) apresentavam apenas o contato com o vírus da hepatite B ou eram falso positivos, o que não acarretaria problemas com o uso desse tipo de medicação. Embora em pequeno percentual (7,41%), os autores defendem a realização do teste sorológico para hepatite em geral, pois nos casos positivos, poder-se-ia optar por medicações alternativas, analisando-se, evidentemente, o fator risco-benefício, não incorrendo em possível prejuízo ao paciente. Além disso, diante de situações de impossibilidade da realização dos testes, sugerem a avaliação das condições epidemiológicas associadas ao risco da doença, antes da introdução dessas medicações.

### PCA 118

#### OCULAR LESIONS AMONGST THE MB LEPROSY SUFFERERS UP TO TWENTY FIVE YEARS OF AGE GROUP WITH THE DURATION OF THE DISEASE UNDER FIVE YEARS

Swapan K Samanta, I S Roy, Asim K Dey, Amitava Chattaraj

B.S.Medical College & Gouripore State Leprosy Hospital, Bankura, West Bengal, PIN 722101, India

One hundred MB leprosy sufferers up to twenty five years of age group with the duration of the disease under five years were examined randomly between July 2001 to January 2002 in Eastern India in search of the ocular lesions most probably related to the disease process. Two third of them were under active treatment and the rest had completed the scheduled MDT regime. 20 of them were from the leprosorium, 25 of them were the residents of the after care leprosy colonies and the other 55 leprosy sufferers were in the society. 70% of the patients were male and 30% female. Only 2% of them had minor physical deformity arising out of leprosy. 11 % of this group of patients had ocular complications most probably related to leprosy. The ocular leprosy included Lagophthalmos in 3 %, Peresis of Orbicularis Oculi in 1%, Complicated Cataract amongst 3%, and Recurrent Uveitis in 3 % and Episcleritis in 1%. Otherwise non specific ocular lesions like Pterygium, Chronic Conjunctivitis, Pinguicula, Chronic Dacryocystitis, Refractive errors and Bitots Spots were encountered in 12 % of the patients of the group. Here lagophthalmos was not associated with any exposure keratitis and responded well with a course of systemic steroid for six weeks. Uveitis responded effectively with local ocular medication along with a course of systemic steroid. The Cataract had a good visual out come following Extra Capsular Cataract Extraction with Intra Ocular Lens Implantation.

Ocular Leprosy in MB patients of younger age group is not an uncommon phenomenon in this era of MDT but it is well controlled by appropriate therapy keeping aside the dread full complications of incurable blindness.

### PCA 119

#### ONE MONTH PREVALENCE OF MENTAL DISTRESS AMONG PEOPLE AFFECTED BY LEPROSY AT ALERT, ETHIOPIA, 2002

Ruth Leekassa, Elizabeth Bizuneh and Atalay Alem  
ALERT (All Africa Leprosy Rehabilitation Training Centre) P.O. Box 165, Addis Ababa, Ethiopia.

Leprosy is a disease that results in handicap as a result of nerve damage. The society has negative feel-

ing towards the affected people. The disability and the negative feeling of the society affect patients' emotional state and behaviour. Many patients attend clinic frequently without specific medical reason and the hypothesis was that they might be doing so because of psychological problems.

**Objective:** To estimate the prevalence of mental distress in people affected by leprosy and to suggest ways to deal with this problem.

**Subjects:** 471 persons affected by leprosy attending the different clinics at ALERT were systematically sampled and interviewed using The Self Reporting Questionnaire (SRQ).

**Instrument:** SRQ is an instrument developed by WHO to detect mental health problem in primary health care attendees in low-income countries. Twenty questions that contain emotional and somatic symptoms were used to identify emotional problems.

**Result:** Those who had at least 11 positive scores out of twenty symptoms from SRQ were regarded as having mental distress. The prevalence of mental distress in the study subjects was 51%. Those patients with handicap reported symptoms of mental distress more often than those without handicap. Over 18 % had suicidal ideation over the past one month.

**Conclusion:** These findings are much higher than findings of similar studies done in Ethiopia and elsewhere, both in clinical and community settings. People affected by leprosy seem to have more mental distress than the general population and people attending clinics for other diseases. The findings emphasize the great need for addressing the psychosocial aspect of the problem with the medical treatment to help these people. Training in leprosy work should also include this as an important component in the management of leprosy. Since SRQ is meant to detect the presence of symptoms of general mental ill health, another study needs to be done to diagnose specific mental disorders in this population.

### PCA 120

#### OUR EXPERIENCE OF ANTILEPROSY PREVENTIVE TREATMENT

A.A. Juscenko, N.G. Urlyapova, V.V. Anokhina, V.V. Duiko

Leprosy Research Institute, Astrakhan, Russian Federation

In Astrakhan endemic zone leprosy incidence among relatives of leprosy patients, long living together with index cases and having no preventive treatment, was 8-10% in pre-sulphonic era. Since the 50<sup>th</sup> of the 20<sup>th</sup> century preventive antileprosy treatment was introduced in Russia. Preventive treatment was administered to persons aged 2-60 years old and having a close household contact with index leprosy case as

well as with relapsed case of leprosy with high BI. As preventive treatment DDS was used at doses, usually administered to leprosy patients. Duration of preventive treatment was 6-12 months. In the period of 1958-1998 preventive treatment was given to 531 persons, among them 13 (2.4%) developed leprosy (7 females and 6 males). It should be noted that 12 out of the 13 cases accounted for the 60<sup>th</sup>-70<sup>th</sup> years. All the diseased had close household contacts with lepromatous leprosy patients. Index cases were as follows: mother - 4 cases, father, son, and brother-by 2 cases each, husband - 3 cases. By Ridley-Jopling classification patients were distributed as follows: LL- 3-, BL -1, TT-7, I- 2, i.e. paucibacillary forms of leprosy prevailed. During preventive treatment no complications were observed. Intolerance of sulphones was rare. In control group (contacts having no preventive treatment) leprosy was developed in 8%. The data obtained suggested rather high effect of preventive treatment. While in the 50<sup>th</sup> in Astrakhan zone populated about 1 million 50—60 cases were registered annually, now, thanks to a set of antileprosy measures, including preventive treatment of leprosy contacts, prevalence of leprosy infection sharply decreased and primary incidence of leprosy has become sporadic

### PCA 121

#### OVERT NEURITIS INFLUENCING THE INDUCTION AND/OR WORSENING OF PHYSICAL DISABILITIES IN MULTIBACILLARY LEPROSY PATIENTS

Pimentel, Maria Inês Fernandes; Nery, José Augusto da Costa; Borges, Esther; Gonçalves, Rosângela Rolo; Sarno, Euzenir Nunes

Laboratório de Hanseníase, Fundação Oswaldo Cruz, Avenida Brasil no. 4365 – Manguinhos – Rio de Janeiro – RJ - CEP: 21045 – 900.

With the goal of studying the role of the overt neuritis (pain, spontaneous or by palpation, in peripheral nerves) in the development and / or worsening of physical disabilities in multibacillary leprosy patients, 103 patients (18.4% BB; 47.6% BL; and 34% LL) were followed-up for an average period of 64.6 months, from the start of multidrug therapy (MDT), 24 doses. They were evaluated in relation to physical disabilities through disability grade and through disability index, before treatment, at the end of the treatment, and at the end of the follow-up period.

Forty six patients (44.7%) had overt neuritis episodes during follow-up (34% during MDT). The overt neuritis episodes were associated mainly with erythema nodosum reactions (55.3%), when compared to reversal reactions (33.3%), although this was not statistically significant. There was a significant correlation between the occurrence of overt neuritis and the development of disabilities, evaluated through

disability grade at the end of treatment ( $p = 0.000274$ ), as well as at the end of whole follow-up period ( $p = 0.006886$ ). Similarly, disabilities measured through the disability index at the end of the treatment ( $p = 0.002165$ ) and through the final disability index ( $p = 0.006274$ ) were significantly correlated with the occurrence of overt neuritis. These data suggest that health professionals must pay attention to the early diagnosis of overt neuritis, giving prompt and adequate therapy, to prevent the development of physical disabilities in multibacillary leprosy patients.

### PCA 122

#### PALPAÇÃO DE RAMO NERVOSO CUTÂNEO COMO UMA ESTRATÉGIA PARA A REDUÇÃO DA PREVALÊNCIA OCULTA DA HANSENÍASE

Alexandre Castelo Branco<sup>1</sup>, Luiz Cosme Cotta Malaquias<sup>2</sup>, Francisco Carlos Félix Lana<sup>3</sup>, Regina Lúcia Barbosa Cypriano<sup>1</sup>, Francisco Carlos Pereira<sup>1</sup>, Mara Firmato Esteves<sup>1</sup>, Simone Teixeira<sup>4</sup>, Andressa Masiero Santos<sup>4</sup>, Maria Cristina Souza Felipe da Silva<sup>5</sup>, Sebastião Fontes Santiago<sup>1</sup>

1 – Policlínica Central Municipal de Saúde, Gov. Valadares, MG, Brasil; 2 – Faculdade de Ciências, Educação e Letras/UNIVALE, Gov. Valadares, MG, Brasil; 3 – Escola de Enfermagem/UFGM, Belo Horizonte, MG, Brasil; 4 – Secretaria Municipal de Saúde, Gov. Valadares, MG, Brasil; 5 – Diretoria Regional de Saúde, Gov. Valadares, MG, Brasil.

Expõe-se o quadro clínico inicial encontrado em contato de hanseníase descoberto a partir da palpação de ramo nervoso cutâneo. Enfatizam a utilização também da palpação de ramos nervoso cutâneos associado com a utilização do exame com monofilamentos como uma estratégia para a detecção precoce e redução da prevalência oculta da hanseníase.

### PCA 123

#### PAUCIBACILLARY HANSEN'S: COMMON CLINICAL TYPES

Melo, S.; Chaves, M.S.R.; Sailaja, K.S.; Souza, P.F.; Cavalcante, C.M.; Abreu, F.; Nery, J.A.C.; Azulay, R. D.

Department of Leprosy, Institute of Dermatology, Santa Casa de Misericórdia, Rio de Janeiro, Brazil.

**Introduction:** Hansen's is an infectious disease with an inconsistent incubation period. The peripheral nerves are affected frequently and cause physical deformities. The incidence of the disease by mycobacterium leprae can be determined by two factors i.e. by the resistance of the patient and by the quantity of the bacilli.

**Materials and Methods:** 938 patients had been evaluated in the out patient department and out of that 103 were diagnosed as paucibacillary. All the patients were submitted for the following clinical examinations Neurodermatological, Bacilloscope, Lepromin test, Histopathological examination of skin. All of them received the Hansen's treatment for the first time in their life. A study was done on the basis of age, sex, clinical classification, type and number of lesions.

**Results:** Out of 103 patients evaluated, 70 patients (68%) were females and 33 patients (32%) were males; the age incidence was from 1 year to 75 years. As per the clinical presentation 76 patients (74%) were tuberculoid type, 17 patients (16.5%) were indeterminate type, 8 patients (8%) were infantile nodular, 2 patients (2%) were absolute neural type. As per the types of lesions 62 patients (60%) were macular, 30 patients (29%) were plaques, 8 (8%) were nodular and 2 (2%) were with out any dermatological lesions but presented with neurological deficit. In relation with number of lesions 61 patients (59%) had single lesion and 18 patients (17%) had two lesions.

**Conclusion:** In spite of the sound clinical knowledge of paucibacillary Hansen's type, the similar features are seen in the other types of clinical manifestations of the cutaneous plaques, infantile nodular Hansen's and absolute neural type. A keen attention should be given to the paucibacillary form, which has typical characteristics with other existing variable clinical entities.

### PCA 124

#### PEROXIDASE AND SUPEROXIDE DISMUTASE LEVELS IN THE LYMPHOCYTES OF LEPROSY PATIENTS

Ravi, P. and Suribabu, C.S.S.

Central Leprosy Teaching & Research Institute, Tirumani, Chengalpattu – 603 001,

Tamil Nadu, India.

Leprosy become more complicated due to acute inflammatory episodes called "Reactions" during the natural course of the diseases while treatment and even after treatment. It is known that CMI is defective in infection with *M. leprae*. This abnormality has been correlated with defect in both numbers and proliferation of T-lymphocytes. The change that occurs in the physiology of Lymphocytes might be one of the reasons for the depressed functions, especially in the effector limb. We have studied a number of enzymes like LDH, Arginase, ADA, Aldolase besides rate of translation by labeled amino acids. In the present study we have studied SOD and Peroxidase levels in leprosy patients throughout the spectrum. We have analysed the above enzyme levels in both RBC

as well as purified lymphocytes using standard procedures. These enzymes showed varying trends in both RBCs and Lymphocytes. Results will be presented and discussed.

### PCA 125

#### POSSIBLE FACTORS AND THEIR COUNTERMEASURES OF LEPROSY MISDIAGNOSIS AND MISSED DIAGNOSIS

Chen Jiakun, et al.

Shanghai Skin Disease & STD Hospital, 200435, Shanghai, China

Abstract: The disability resulted from leprosy make the public develop apprehensiveness and discrimination on leprosy. Therefore it is very important to diagnoses early and accurately. Never establish diagnosis unless there are enough evidences. If it happen, the distress will drop the patients and their relatives mentally and physically. Once patients are misdiagnosed or missed diagnosed, irreversible disability and social public problem will be produced. Possible factors include 1) low precautions of leprosy presence. 2) absence of leprosy knowledge and do not master main points of diagnosis. 3) imperfect, careless or not enough synthetic analysis for examination. 4) leprosy with other skin diseases or peripheral nerve diseases. 5) variation of leprotic symptoms and signs. 6) incorrect preliminary diagnosis results in return visit as usual, especially for senior. 7) taboo leprosy and hide the truth. We discuss their countermeasures.

### PCA 126

#### POST RELEASE REACTIONS AND SKIN SMEAR RESULTS

Albuquerque, E.C.A.; Gallo, M.E.N.; Nery, J.A.C.; Vieira, D.M.

National Collaborating Center in Leprosy – FIOCRUZ – RJ

The occurrence of reaction manifestations following release from treatment in leprosy patients remains as one of the most worrisome matters and of difficult solution. With the objective of better understanding the problem, we correlated the skin smears results with the presence of reactions in cases submitted to multidrug therapy destined to multibacillary leprosy patients (WHO/MDT). 164 cases were evaluated that presented reactions following release, where 124 cases had received 24 doses and 40 cases had received 12 doses of WHO/MDT. In the evaluation of the results, we used the system of Word processing, data bank and statistics for epidemiology in microcomputers EPI INFO 6.01. From the total of cases, 51.2% (84/164) presented positive skin smears at the

moment of reaction. When we separately evaluated in relation to the number of doses, we observed that, following 24 doses, 53.2% (66/124) and after 12 doses, 45.0% (18/40) developed post release reactions with negative skin smears. The statistical tests showed no significant statistical difference between positive and negative skin smears and the occurrence of reactions in leprosy patients following release from WHO/MDT for multibacillary, signaling the need for treatment with anti-inflammatory drugs and strengthening the participation of the immune system in the etiology of reaction episodes.

### PCA 127

#### PREVALENCE OF OCULAR COMPLICATIONS IN NEWLY DIAGNOSED AND RELAPSED LEPROMATOUS PATIENTS

Ebenezer Daniel, Sheena Koshy and P S S Sundar Rao

Schieffellin Leprosy Research and Training Center, Karigiri, India - 632106

Results on the ocular complications of 301 lepromatous patients, newly diagnosed (238) and relapsed (63), male (213) (71%) and female (88) (29%), polar lepromatous (LL) (41) (14%) and borderline (BL) (260) (86%) with age ranging from 7 to 78 years with 41.5 (14) mean (SD) and duration of disease from 1 year to 32 years with 6.2 (7.8) mean (SD), belonging to a geographically defined leprosy control area program in South India who had base-line anterior-segment ophthalmic examination is presented.

Ocular complications, categorized as leprosy related complications (lagophthalmos, ectropion, entropion, trichiasis, corneal opacities, corneal sensory impairment, corneal ulcer, episcleritis, scleritis, iridocyclitis and iris atrophy) (LRC) and general complications (naso-lacrimal duct block, pterygium and cataract) (GC), were found in 213 (71%) patients. 88 (29%) patients had no ocular complications, 30 (10%) had only GC, 111 (37%) had only LRC and 72 (24%) had both. More elderly patients had ocular complications (P=0.000) as did LL patients (85%) compared with BL (68%) (P=0.03). Limb deformity (P=0.000) and smear positivity at any one site at enrollment (P=0.02) and visual loss (P=0.002) were associated with ocular complications. Ocular complications were not significantly different in relapsed patients compared with newly diagnosed lepromatous patients. Similar associations were found when LRC were analyzed separately. More cataract was present in those who had LRC (30%) than those who did not (12%) (P=0.000). GC were associated with increasing age (P=0.000), were more in LL patients (49%) than BL (32%) (P=0.03) and were associated with increased limb deformity (P=0.006). Corneal opacity with vision loss was more in patients with GC (P=0.01).

### PCA 128

PRIOR THE START AND AFTER TREATMENT WITH MULTIDRUG THERAPY IN LEPROSY: A HISTOLOGICAL AND IMMUNOHISTOCHEMISTRY STUDY

M.C. Floriano, J. Tomimori-Yamashita, O. Rotta

Department of Dermatology, Paulista School of Medicine - Federal University of São Paulo, Brazil.

Rua Botucatu, 740. Vila Clementino. São Paulo (SP), Brasil.

The fixed-duration multidrug therapy (MDT) has been of a great value in the control of leprosy. Its effectiveness is basically shown through clinical and bacterioscopic parameters. The goal of this study was tissue analysis by histological and immunohistochemistry techniques for populations of lymphocytes T helper, lymphocytes T suppressor, macrophages and *Mycobacterium leprae* antigens on the patients undergone MDT.

Twenty-eight patients with leprosy were studied. They were classified according Madri classification. Seven out of them were tuberculoid leprosy (T) and they were classified as paucibacillary group to be treated. Twenty-one were classified as multibacillary group, twelve of the borderline leprosy (B) and nine of the lepromatous leprosy (L). All patients were treated with MDT.

Skin biopsies were made after the end of the treatment at same site that it had been made before the beginning of the therapy and histological and immunohistochemistry analysis with anti-OPD4, anti-CD8, anti-CD68 and anti-BCG antibodies were made.

The decrease of the inflammatory cells in the infiltrate was noticed of leprosy after the treatment. The CD4+ cells were more expressive in T leprosy than in B and L leprosy before treatment. After treatment this difference was not noticed.

The distribution of CD8+ cells and CD68+ cells was similar in different forms of leprosy, before as well as after treatment.

The demonstration of the mycobacterial antigens in the tissues through the BCG+ cells was more sensitive than the demonstration of acid-fast bacilli in the tissue through the Fite-Faraco stain.

### PCA 129

REAÇÃO DE REVERSÃO REVELANDO DOENÇA DE HANSEN

Mohamed A. Azzouz; Francisca Estrêla Maroja Dantas; Carla Wanderley Gayoso; M<sup>a</sup> das Graças V. A. Almeida; Francimary de Souza Buriti; Carlos Alberto F. Ramos

UFPB/ Hospital Universitário Lauro Wanderley.

R.M.S. 32 anos, masculino, branco, casado, natural e procedente de João Pessoa- Pb, apresentava há 1 ano lesões no corpo tipo urticariana, que melhorava com corticoide sistêmico e com aparecimento das lesões após a suspensão da medicação. Ao exame apresentava nervos espessados e lesões em placa eritematosas e infiltrada em tórax e abdome. Confirmado o diagnóstico através da biopsia, Baciloscopia negativa, iniciamos tratamento com o esquema paucibacilar e corticoterapia. Trata-se de manifestação aguda da Doença de Hansen. Cerca de 20% da doença é diagnosticada a partir da reação.

### PCA 130

REAÇÃO HANSÊNICA TIPO I EXUBERANTE SIMULANDO FENÔMENO DE LÚCIO

Ana Célia de A. Mesquita; Heitor de Sá Gonçalves; Ana Fátima P. Teixeira; Francisco José Dias Branco; Maria Araci P. Aires Centro de Dermatologia Dona Libânia - SESA - CE Av. Pedro I, 1033 - Centro - Fortaleza - CE

AMS, masculino, 71 anos, agricultor, procedente de Quixadá - CE. Paciente portador de hanseníase virchoviana, diagnosticada pela associação de clínica com a baciloscopia (IB = 2,5), além de histopatologia compatível. Na consulta inicial apresentava extensa placa eritemato-infiltrada, com ausência de sensibilidade térmica e dolorosa na face medial do braço esquerdo, e inúmeras lesões semelhantes, am menores dimensões, disseminadas pelo tegumento, predominando em tronco e membros superiores. Iniciou esquemaq poli quimioterápico para multibacilares da OMS, e cerca de 15 dias após, apresentou exuberante quadro de reação tipo I, com aumento da infiltração de numerosas lesões. Foi medicado com prednisona, na dose de 0,8 mg/kg/dia, evoluindo com resposta terapêutica bastante satisfatória. Motivo da apresentação: exuberância de reação tip I em hanseníase, simulando fenômeno de lúcio, e a pronta resposta terapêutica á doses moderadas de corticoterapia.

### PCA 131

REAÇÃO TIPO I GRAVE, COM LESÕES INCOMUNS EM CRIANÇA DE 7 ANOS COM HANSENÍASE DIMORFA - RELATO DE CASO

Grossi, M.A.F.; Freire, H.B.M.; Teixeira, M.L.G.; Villarroel, M.F.; Pires, R.P.; Lyon, S.

Centro Geral De Pediatria (Cgp) and Hospital Eduardo De Menezes (Hem) Fundação Hospitalar Do Estado De Minas Gerais. Alameda Ezequiel Dias Nº 345 Cep: 30130 110 Belo Horizonte, Mg - Brasil

**Relato de Caso:** D.N.L.C., 07 anos, sexo masculino, faioderma, natural e procedente de Teófilo Otoni,

Minas Gerais, internado no C.G.P em 10/01, com história de há 03 anos ter apresentado mácula hipocrômica no tórax, com posterior aumento do número das lesões. Diagnóstico de Hanseníase Dimorfa em 09/01, com Grau Zero de Incapacidade, no Centro de Saúde de sua cidade, aonde iniciou PQT/MB. Passou a apresentar exacerbação das lesões que ficaram eritemato-infiltradas e edematosas, com posterior necrose e ulceração em face, orelhas, tronco e membros. Enviado para o Centro de Referência do HEM em Belo Horizonte quando foi feito o diagnóstico de Reação Tipo I Necrótica com infecção secundária e encaminhado para o CGP, aonde manteve a PQT/MB, iniciou Prednisona, Oxacilina e Cloranfenicol, limpeza e proteção da pele com Ácidos Graxos Essenciais e Curativos Interativos com Hidrocoloide nas lesões ulceradas. A criança evoluiu com melhora progressiva das lesões cutâneas e piora sensitiva e motora em Ulnares e Tibiais, comprovada pelo monitoramento da função neural: força muscular, estesiometria e eletroneuromiografia, sendo indicada Neurolise de Ulnares, Medianos, Fibulares e Tibiais. Após cirurgia e melhora inicial a criança vem sendo acompanhada pelo serviço de origem e pelo CGP.

**Motivo da Apresentação:** Caso pouco usual e grave da Reação Tipo I em criança de 7 anos.

#### REAÇÕES ADVERSAS À PQT, NUM PERÍODO DE DEZ ANOS.

Dalila Filomena Mohalem, Maria do Rosário Vidigal, Mônica Nóbrega Cunha

Centro de Saúde Tranquilidade

Secretaria de Saúde de Guarulhos

Av. Emílio Ribas, nº 1845 – Guarulhos – SP.

Uma Avaliação Da Incidência De Reações Adversas À Poliquimioterapia Ocorridas Num Período De Dez Anos (1992 A 2002), No Centro De Saúde Tranquilidade; Entre Elas: Anemia Hemolítica, Hepatite, Insuficiência Renal, Síndrome Pseudo Gripal, Vômitos Incoercíveis E Púrpura Trombocitopênica.

### PCA 132

#### REAÇÕES ADVERSAS À PQT, NUM PERÍODO DE DEZ ANOS

Dalila Filomena Mohalem, Maria do Rosário Vidigal, Mônica Nóbrega Cunha

Centro de Saúde Tranquilidade

Secretaria de Saúde de Guarulhos

Av. Emílio Ribas, nº 1845 - Guarulhos - SP.

Uma Avaliação da Incidência de Reações Adversas à Poliquimioterapia ocorridas num período de dez anos (1992 a 2002), no centro de saúde tranquilidade; entre elas: Anemia Hemolítica, Hepatite, Insu-

ficiência Renal, Síndrome Pseudo Gripal, Vômitos Incoercíveis e Púrpura Trombocitopênica.

### PCA 133

#### REACTIONAL STATES IN CO-INFECTED LEP-ROSY X HIV POSITIVE PATIENTS

Nery, J.A.C.; Sá, R.P.; Guatierrez, M.C.; Sales, A.M.; Machado, A.M.; Gomes, A.P.; Sampaio, E.P.

Leprosy Laboratory – Oswaldo Cruz Foundation – RJ – Brazil.

**Introduction:** Although endemic in Brazil, leprosy disease is uncommon in HIV+ individuals. HIV+ patients present the same stable forms and reactional episodes described in the HIV negative leprosy patients. As the disease develops into HIV-positive individuals, a variety of other opportunistic infections may develop, some of which are directly related to deficiencies in the cellular immune response. However, leprosy does not seem to be related to the immune status of HIV+ patients.

**Objective:** Describe the reactional episodes among the co-infected leprosy × HIV+ patients.

**Methods:** With the intent to evaluate the frequency of reactional episodes in co-infected leprosy × HIV+ patients, we followed 38 patients. They were treated at Outpatient Unit of Leprosy Laboratory / Oswaldo Cruz Foundation / Rio de Janeiro / Brazil with multidrugtherapy (OMS).

**Results:** Out of 38 cases, 24 (63%) patients were paucibacillary (PB) and 14 (37%) were multibacillary (MB). Eighteen patients (47%) were male and 20 (53%) were female, ranging from 17 to 64 years of age. Twenty-three (60%) patients presented reactional episodes, and 20 patients developed type I reaction and 3 developed type II reaction. Among the PB patients, 21 (87%) presented reactional states and in the MB, 11 (78%) patients. Nineteen (825) developed a reaction during the first 6 months of treatment, 3 (13%) during the first year and only 1 (4%) after this. Only 8 (34%) patients presented more than one episode of reaction.

**Conclusion:** The HIV co-infection does not seem to change the natural course of leprosy, nor to interfere on the specific immune response to *M. leprae*, but the frequency of reaction in PB patients is higher than in HIV negative patients.

### PCA 134

#### REACTIONS IN LEPROSY: AN EPIDEMIOLOGICAL STUDY OF 2600 PATIENTS FROM NORTH INDIA

Bhushan Kumar, Inderjeet Kaur, Sunil Dogra

Department of Dermatology, Venereology & Leprology, Postgraduate Institute of Medical Education and Research, Chandigarh-160012, India.

Although leprosy reactions are a very common phenomenon, very limited data has been published on their epidemiology from India, which harbours the largest number of case load in the world. This paper presents epidemiological data over a period of 15 years on reversal reactions (RR) and erythema nodosum leprosum (ENL) from retrospective analyses of 2600 new leprosy patients registered and followed up at our clinic. Average period of follow up was for 72 months (range 24-156 months). There were 1634 males (mean age  $37 \pm 3.2$  years) and 966 female patients (mean age  $4 \pm 12.3$  years). 1494 (57.4%) of them had multibacillary and 1106 (42.5%) had paucibacillary disease labelled on the basis of slit skin smear.

The prevalence of RR at registration was 24% and that of ENL was 6.8%. The overall incidence rates among patients available for follow-up were 8.2%/100 persons years (PYAR) at risk for RR and 4.1%/100 PYAR for ENL. The most significant risk factor for RR was extent of clinical disease measured by count of body areas involved. The observation of other investigators that most RRs occur during first year of treatment was confirmed in our study. Lepromatous disease and high bacteriological index ( $BI \geq 3$ ) were significant risk factors for ENL reactions. A total of 226/507 (26.4% of all ENL cases) patients had > 4 episodes over a period of > 3 years and the reactions continued to occur in decreased frequency till 7.2 years in few patients. Late RR was seen in 7.1% of all leprosy patients. The incidence of RR declined steadily after the start of the treatment but recurrent episodes continued to occur even up to 6 years after diagnosis.

### PCA 135

#### RECIDIVA PAUCIBACILAR – RELATO DE UM CASO

Flávio Marcondes Hercules, Mônica Duarte da Cunha, Maria Leide Wand Del Rey de Oliveira

Serviço de Dermatologia do Hospital Universitário Clementino Fraga Filho – UFRJ.

Os novos esquemas terapêuticos para hanseníase e redução no tempo da poliquimioterapia (PQT), torna a recidiva um tema cada vez mais importante. A OMS (1994) detectou coeficiente cumulativo de recidiva paucibacilar de 1,7%. Segue a descrição de 1 caso de recidiva paucibacilar: paciente, feminina, 46 anos, parda, MG, do lar. Início do quadro em 07/1990 com surgimento de 3 lesões eritemato-infiltradas, hipoestésicas, situadas nas regiões malaras, acompanhadas de espessamento ulnar bilateral. A biopsia cutânea evidenciou hanseníase tuberculóide, o Mitsuda foi positivo (10mm), e a baciloscopia neg-

ativa. Foi iniciado tratamento com PQT PB, sem intercorrências até o seu término. Permaneceu assintomática, porém 9 anos após surgiu nova lesão eritemato-infiltrada e hipoestésica, na região frontal, associada à neurite fibular direita. Foi submetida a 60mg de prednisona com melhora da lesão (hipercromia residual) e desaparecimento da neurite. A biopsia revelou denso infiltrado linfoplasmocitário e histiocitário, circundando nervo com células epitelióides e gigantes formando granulomas. A baciloscopia foi negativa. Desde então evoluiu com períodos de piora e melhora da lesão, de acordo com curso oscilante de corticoterapia. Não apresentou surgimento de novas lesões ou recidiva da neurite. Em 01/2002 foi reiniciado tratamento com esquema PQT MB. Ressalta-se que pelas regras atuais do Ministério da Saúde esta paciente deveria ter sido tratada no primeiro episódio com esquema multibacilar, pois apresentava acometimento neural de 2 troncos.

### PCA 136

#### RECOMBINANT HUMAN PLATELET-DERIVED GROWTH FACTOR FOR TREATMENT OF NEUROPATHIC ULCERS IN LEPROSY PATIENTS

Winnie Ooi. Lahey Clinic, Burlington, MA USA

Data from the World Health Organisation indicates that the global prevalence rate for leprosy at the end of 2000 has been reduced to less than 1 per 10,000: an eighty nine percent drop over the past 15 years. This has been achieved through early detection and free effective multidrug therapy (MDT). Leprosy remains a public health problem however, in six endemic countries that represent approximately eighty three percent of prevalence worldwide. Nerve lesions, which are often progressive and irreversible may develop in one third of patients despite effective multidrug therapy. Therefore, clinicians treating leprosy patients will continue to have to deal with the complications from nerve damage including deformities and anaesthetic ulcers for many years to come.

Recombinant human platelet derived growth factor (PDGF) gel has been shown to increase the healing of diabetic neuropathic ulcers through fibroblast activation and stimulation of granulation tissue formation. A small number of patients in our clinic with lower extremity neuropathic ulcers secondary to leprosy were treated successfully with PDGF after failing to respond to conventional therapy including topical or oral antibiotics. All four patients had successfully completed MDT for lepromatous leprosy but had significant residual peripheral neuropathy and deformities. Three patients developed full thickness plantar ulcers from chronic pressure and one had a traumatic ulcer in an anaesthetic area on the lower leg. All four ulcers were rendered free of necrotic and infected tissue after debridement and

were treated with once daily topical application of 0.01% PDGF gel and good wound care until complete wound closure for three patients. The fourth patient had a marked decrease in ulcer size but was temporarily lost to follow up for nine months. The duration of treatment ranged from 8 weeks to 7 months in which no side effects were observed. None of the ulcers has recurred after a follow-up of 8 to 30 months. Our results support the use of PDGF in non-healing neuropathic ulcers in leprosy patients and it warrants further study.

### PCA 137

#### REVERSAL REACTIONS IN AN OUTCOME LEPROSY CLINIC IN SALVADOR/BAHIA

Vitória Rêgo, Isabela Martins, Paulo Machado

Serviço de Imunologia e Serviço de Dermatologia, Hospital Universitário Prof. Edgard Santos, Universidade Federal da Bahia.

293 patients with leprosy were followed between 4 to 9 years after start of multidrugtherapy (MDT), to characterize reversal reactions (RR). RR were documented in 79 patients (27%), and begun during treatment in 47 patients (59.5%). Twenty patients (25%) had clinical presentation of RR after MDT and during the follow-up period. Neuritis with or without skin involvement occurred in 73% of patients, and cutaneous manifestations without neuritis were found in 27%. The majority of the patients (49/79) were paucibacillary, while the average bacillary index was 2.4 in the 27 multibacillary patients. Our data shows that the beginning of MDT is an important risk factor for the development of RR, which presents with neuritis in the majority of the patients. Due to the morbidity associated with neuritis, all leprosy patients should be carefully monitored during MDT in order to provide an early detection of reversal reactions.

### PCA 138

#### REVIEW OF 100 PATIENTS WITH CHRONIC AND RECURRENT NEURITIS TREATED IN A SPECIAL NEURITIS CLINIC

Elizabeth Bizuneh, Ruth Leekassa and Ronald Kazen

All Africa Leprosy Rehabilitation Training Center (ALERT), P.O.Box 165, Addis Ababa, Ethiopia, Fax: 251 1 711199.

Leprosy is a chronic disease that affects skin and nerves. Nerve damage is the main cause of disability and stigma. Therefore, prevention and management of nerve damage is pivotal in leprosy control. ALERT as a referral center deals with a large number of leprosy patients with complications. Most of them

present with recurrent and chronic neuritis. A group of these patients were managed with individualized dose regimen of steroid in a special neuritis clinic. One hundred patients with an average of two years follow up were reviewed. Of these, 59 were males and the age of these cases ranged from 15 to 70. Thirty-seven were PB and 63 MB according to WHO classification. Ninety-eight of the cases were released from MDT and 2 were on MDT at the time of review. The outcome of treatment was measured by VMT/STG; 75 improved, 20 remained the same and five deteriorated. Of the 75 who improved, 20 had only motor improvement, 30 improved in only sensory function and 25 had both motor and sensory nerve function improvement. The results indicate that leprosy patients with recurrent and chronic neuritis could be better managed with individualized dose steroids and long term follow up.

### PCA 139

#### SECUELAS DE LA LEPRO EN EL AREA OTORRINOLARINGOLOGICA

Menchades Guardiola, MI; Lafarga Vázquez, J.; Gómez Echevarría, JR

Sanatorio San Francisco de Borja. Dirección: Sanatorio San Francisco de Borja. 03791 FONTILLES - VALL DE LAGUART (ALICANTE) ESPAÑA Teléfono: 96 558 33 50 Fax: 96 558 33 76. E-mail: [sanatoria@fontilles.org](mailto:sanatoria@fontilles.org).

La Lepra afecta al territorio otorrinolaringológico con frecuencia. La lesión nasal aparece hasta en el 90% de los casos en las formas multibaciles. También se afecta la apófisis alveolar anterior del maxilar, la laringe, etc. Se revisan los enfermos del Sanatorio San Francisco de Borja, 80 internos y 150 externos, realizándose una exploración otorrinolaringológica completa. Se trata de enfermos inactivos actualmente en su mayoría, y en los cuales sólo hallamos las secuelas de la enfermedad. Se presenta iconografía de las secuelas más representativas y los resultados de la revisión.

### PCA 140

#### SERUM ZINC LEVEL AND LEPROMIN (MIT-SUDA) TEST IN NONREACTONAL MULTIBACILLARY LEPROSY PATIENTS

Indah Handayani, Sri Linuwih, A. Djuanda, Retno W Soebaryo, I.M. Wisnu and Emmy Sjamsoe

Dep. of Dermato-venereology Faculty of Medicine University of Indonesia Jakarta

Serum zinc level in leprosy patients is lower than in healthy people. The decreasing level is in accordance with clinical spectrum and cellular immune response

in leprosy. It is still not clear whether people with Zn deficiency are more susceptible to leprosy or *M. leprae* metabolism will cause low serum Zn level, and whether leprosy treatment can increase serum Zn level and cellular immune response. A cross-sectional study was done on 1999. The subjects were non-reactional MB leprosy patients which are divided into 3 groups, each group consists of 20 patients i.e. untreated patients, 6-12 months therapy and more than 18 months. Determination of serum Zn level and a lepromin test were conducted in all subjects. Sixty five percent of the subject were between 14-30 years old, male were more common (78.33%) than female. There were no statistically significant differences in distribution of starting treatment age, sex, leprosy type, body mass index, and duration of illness among the three groups. The serum Zn level of the 3 groups were not significantly different ( $p = 0.998$ ), neither were the lepromin test result between the subjects with and without treatment ( $p > 0.05$ ). Serum Zn level and lepromin test result were not influenced by the duration of leprosy treatment. The serum Zn level was in accordance and significantly correlated with the lepromin test result ( $p = 0.045$ ).

### PCA 141

#### SILENT NEURITIS IN MULTIBACILLARY LEPROSY: STUDY OF PATIENTS DURING AND AFTER MULTIDRUG THERAPY

Pimentel, Maria Inês Fernandes; Nery, José Augusto da Costa; Borges, Esther; Gonçalves, Rosângela Rolo; Sarno, Euzenir Nunes

Laboratório de Hanseníase, Fundação Oswaldo Cruz. Avenida Brasil no. 4365 – Mangueiras – Rio de Janeiro – RJ - CEP: 21045 – 900

In an effort to evaluate the frequency of silent neuritis, 103 multibacillary leprosy patients (18.4% BB, 47.6% BL, and 34% LL) were followed-up during an average period of 64.6 months from diagnosis, during and after multidrug therapy (24 doses), in relation to physical disabilities, according to the disability grade. Studying twelve patients who presented a worsening of the disability grade at the end of the treatment, or at the end of the follow-up, in comparison with the disability grade before treatment, we found two patients who experienced a worsening of physical disabilities without overt neuritis. We further analysed in detail four patients who developed final disability grade of 2, who had no disabilities or had disability grade of 1 at the beginning of the treatment, and we observed two other patients with silent neuritis. Three patients who presented a worse disability grade at the end of follow-up, in comparison with the end of treatment, were studied, and one of them had also silent neuritis. We found that five patients (4.9%) developed silent neuritis, during or af-

ter multidrug therapy. We recommend a careful neurological examination during the whole follow-up of multibacillary patients, aiming the detection and prompt treatment of silent neuritis

### PCA 142

#### SOME LABORATORY INDICES IN LEPROSY NEUROPATHIES

M.N. Dyachina, Y.G. Androsjuck, O.V. Degtyarev, E.I. Shats

Leprosy Research Institute, Astrakhan, Russian Federation

Exacerbations of leprosy neuropathies often occur without clinical manifestations, but they result in decreased functional ability of the damaged extremities and accelerated invalidization. Over 3 years 97 patients with leprosy duration of 5-20 years and clinically proved neuropathies were under study (74 patients with MB and 23 patients with PB-leprosy). According to the degree of nerve damage patients under study were divided into two groups: 1) patients with deep invalidizing disturbances (contractures, mutilations, neurotrophic ulcers), and 2) patients with minimal clinical manifestations limited by hypertrophy of nerve trunks and pain syndrome. For prognostic assessment of course of leprosy neuropathies certain clinical and laboratory indices were studied. With using ELISA in blood sera antibodies towards PGL-1 and protein antigens of *M. leprae* as well as against sonicate of rabbit sciatic nerves (AgPN) were determined. Besides, concentrations of lactoferrin (LF) and C-reactive protein (CRP) were estimated. Conduction velocity in skin areas supplied with leprosy-damaged nerves was estimated according to Nakatani. Active clinical manifestations of neuropathies are the most often correlated with increased levels of antibodies against *M. leprae* antigens and AgPN as well as with high concentrations of LF in blood serum. These indices are correlated with the results of testing biologically active skin zones. CRP levels are widely varied in patients and did not always correspond to other indices. Thus, a set of laboratory and clinical tests: levels of antibodies against *M. leprae* antigens, AgPN, blood LF as well as conduction velocity in zones innervated by damaged nerves might be used for prognosis of the course of leprosy neuropathies.

### PCA 143

#### SQUAMOUS CELL CARCINOMA AND CHRONIC LOWER LEG ULCER IN LEPROSY

YU Airu

Zhejiang Provincial Institute of Dermatology, 313200, Deqing, Zhejiang, China

**Objective:** To further determine the epidemiological status, clinical features and prognosis of neoplastic transformation in chronic lower leg ulcers of leprosy.

**Methods:** Cases with neoplastic transformation in chronic lower leg ulcers of leprosy, which were diagnosed and admitted to a provincial leprosy hospital for operation, in the recent 20 years were retrospectively reviewed and analyzed.

**Results:** Between Jun 1980 and Sep 2001, 21 cases were diagnosed and treated. There were 15 males and 6 females with average age of 59.1 years (48-71 years) and mean ulcer duration of 16.2 years (8-30 years); tumors located 16 in sole, 4 in leg and 1 in ankle. Squamous cell carcinoma was the only neoplasia in this group with well to moderate tumor differentiation (grade 1-2), however metastasis is common (10 cases) and fatal. Above-knee amputation had been performed on all cases (10 cases) before Sep 1993, and in the remaining cases below-knee amputation were performed on. By Sep 2001, there were 10 alive, 9 died of cancer metastasis and 3 lost follow-up. The average postoperative survival was 37.1 months.

[**Key Words**] Squamous Cell Carcinoma; Ulcer; Lower Leg; Leprosy

### PCA 144

#### STUDY OF REACTION IN THE HANSEN'S - AGED BETWEEN 0 TO 14 YEARS

Barcelos, D.L.; França J.R.; Spinelli, L.P.; Silva, R.T.; Cavalcante, C.M.; Melo S.; Nery, J.A.C.; Azulay, R.D.

Department of Leprosy, Institute of Dermatology, Santa Casa de Misericórdia, Rio de Janeiro, Brazil.

**Introduction:** Hansen's is an infectious disease; it is well known that it can present as acute and sub-acute types according to reaction state. Various authors has investigated and inferred about this. However very few studied in the age group between the 0 to 14 years. In this study we observed the incidence of reaction in children and followed up them from June 1992 to June 1998.

**Material and Methods:** Out of total 938 patients with Hansen's, 55 patients were in this particular age group of 0 to 14 years. According to the classification of Madrid these were divided into infantile nodular and tuberculoid types. All the patients were treated for the first time in their life for the Hansen's and all of them had the laboratory examinations before the treatment.

**Results:** Out of 55 patients studied 9 (16%) had episodic reactions, 5 (56%) had Type-I reaction, 2 (22%) had Type-II reaction and 2 (22%) had localized neuritis. As per these statistics males and females are equally affected and reactions were fre-

quently noted in the more than 5 years age group. Out of 9 patients who had reactions, 6 (67%) were multibacillary. Significant reactions noted in the patients with disseminated cutaneous lesions. At the first consultation none of them presented with any reaction where as during the treatment period, 3 patients showed up with episodic reactions.

**Conclusion:** All though the risk of having these episodic reactions in children are very low but this should be always considered as a factor of morbidity during the treatment.

### PCA 145

#### STUDY OF REACTIONAL STATES IN CHILDREN UNDER 15 YEARS OF AGE

Maria de Fátima Marója, Angelita Akemi Nakamuta, Valderiza Pedrosa and Lúcio Tshuyoki Ihara

Fundação Alfredo da Matta - Rua Codajás, 25 - Manaus - Amazonas

Detection of Hansen's disease in children under 15 years of age in the State of Amazonas, has presented a gradual reduction comparing the co-efficiencies of 3,52/10.000 inhabitants in 1988 and 1,29/10.000 inhabitants in 2000. However, it still remains hyperendemic. Reactional states occur frequently in Hansen's disease, especially in its multi-bacillar forms. Hansen's disease in childhood shows the same aspects of the disease as in the adult. However, few studies on reactional states in Hansen's disease have been related in known literature in age groups below 15 years. Reactional States represent a great problem in the management of patients receiving treatment and after discharge. They are also the largest cause of nerve damage, and consequently incapacity. The general objective of this work is to study reactional states in children under 15 years of age diagnosed with Hansen's disease, determining the frequency of Type 1 and Type 2 reaction, relationship with clinical forms and evolution of treatment. A descriptive study of Hansen's disease in children under 15 years of age, diagnosed and treated at the Fundação Alfredo da Matta between January 1998 and January 2001 was carried out using Patient's notes of 216 patients, of these 57,4% were male and 42,6 % female. The most frequent age group was between 11 and 15 years old, representing 60,6% of the patients. In relation to clinical form, 59,7% were indeterminate and tuberculoide forms, 17,5% Borderline Tuberculoide, 7,4% Borderline Borderline, 8,3% Borderline Virchoviana and 6,9% Virchoviana. Of the 216 cases studied, 55 presented reactional episodes, representing a frequency of 25,4%. Hansen's reaction was the most frequent in dimorphic forms. Pure Neuritis had a frequency of 58,6% and was associated with other types of reaction in 31,0%. These episodes appeared most frequently during treatment. The drug most frequently

used was prednisilone with a mean period of use being 4 months. In other patients who used prednisilone only 1 presented a decrease in growth.

### PCA 146

#### SURTO REACIONAL TIPO MACULOSO EM HANSENÍASE DIMORFA

Ana Paula de Almeida Costa, Jane Ventury Leal, Maria Alice Ribeiro Ozório, Roberta Leste Motta, Rosimeire Arcanjo Hosken, Rozana Castorina da Silva, Sandra Lyon

Fundação Hospitalar do Estado de Minas Gerais, Hospital Eduardo de Menezes, Centro Colaborador de Referência em Dermatologia Sanitária. Av. Dr. Cristiano Rezende 2213, Bonsucesso, Belo Horizonte, MG.

A hanseníase é uma doença granulomatosa inflamatória crônica causada pelo *Micobacterium leprae*, também denominado bacilo de Hansen, e acomete pele e nervos periféricos. Evolui lenta e insidiosamente, sendo, muitas vezes, interrompida por episódios inflamatórios agudos e subagudos, cutâneos ou extracutâneos, chamados surtos reacionais, que guardam relação com o terreno imunológico do indivíduo. São fenômenos reacionais do tipo I e II. As reações tipo I são mediadas por células (imunidade celular) e ocorre nos tuberculóides e dimorfos. As reações tipo II são mediadas por anticorpos (imunidade humoral). Nos pacientes dimorfos ocorre edema e eritema de lesões pré-existentes e o aparecimento de lesões novas, pápulas e placas eritematosas em pequeno número, na maioria das vezes em sua vizinhança. Pode haver comprometimento neural acentuado com possibilidade de graves neurites. Quando a reação regride, as novas lesões podem persistir e a doença retoma seu curso. Os autores apresentam o caso de uma paciente de 43 anos, sexo feminino, com o diagnóstico clínico e histopatológico de hanseníase da forma diformo (Índice Baciloscópio = zero) tratada com esquema de poliquimioterapia multibacilar por 12 meses. A partir desse período, começou a apresentar lesões maculosas hipocrômicas localizadas na face, tronco, nádegas e coxa direita e também neurite dos nervos periféricos. A paciente foi medicada com Prednisona 1 mg/kg/dia até a regressão total das lesões, quando se iniciou a retirada gradativa do corticóide.

**Motivo da apresentação:** as reações hanseníase fôgem muitas vezes do padrão habitual.

### PCA 147

#### SURVEILLANCE ON UVEA DISEASE IN LEPROSY

Yan Liangbin, Zhang Guocheng, Ye Ganyun, *et al.*

Institute of Dermatology, Chinese Academy of Medical Sciences and Peking Union Medical College, National Center for STD and Leprosy Control, Nanjing 210042

To determine the prevalence and characteristic of the uvea disease in leprosy. 1045 persons cured of leprosy and active cases of leprosy in Taixing, Jiangsu were checked by specially trained ophthalmologists. Uvea disease caused by direct invasion of *M. leprae*, Type-2 reaction, and secondary corneal disorders were found in 7.85% of the all investigated cases. The prevalence rate of the disease was found significantly higher in active cases (25%), multi-bacillary cases (24.47%) and those with long duration of the disease (38.93%). It was characterized by granulomatous iridocyclitis, with presenting of redness of the ciliary body (18.29%), irregular pupil (56.1%), diminished light reaction (50%), iris posterior synechiae (43.9%), small pupil (36.59%), blocked pupil (23.17%), synechia iridis anterior (20.73%), de-pigmentation (20.73%), and iridoleptysis (19.51%). Secondary cataract was found in 81.54% of those with chronic iridocyclitis, of which 60% with reduced vision, 40.24% blindness, and 52.73% curable blindness. The uvea disease in leprosy could be caused either by direct invasion of the *M. leprae* or type-2 reaction. It was commonly found in active cases, multi-bacillary cases and those with long duration of the disease. Granulomatous iridocyclitis is its clinical characteristic, and most of them develop cataract and loss of vision

### PCA 148

#### THE ASSOCIATION OF SKIN PATCHES OVER SUPERFICIALLY LOCATED NERVE TRUNKS AND NEURITIS IN LEPROSY

Rajgopal Reddy, Suman Jain, Syed Muzaffarullah, Sujai Suneetha

LEPRA India - Blue Peter Research Centre, Cherlappally, Hyderabad - 501301

We have previously shown the strong association between facial patches located over the eye and the development of lagophthalmos. The aim of this study was to identify any such association between the presences of skin patches over superficially located trunk nerves at known sites of predilection and the development of neuritis/nerve damage.

All the records of leprosy patients registered at the centre over a 2 year period (Jan. 2000 to Dec.2001) were analysed with regard to the location and size of skin patches over the trunk nerves and the presence of nerve damage. The areas considered were the skin over the olecranon fossa at the elbow (for ulnar nerve), the front of wrist (for Median nerve), the head of fibula (for lateral popliteal nerve) and around the eyes (for facial nerve). The patches were arbitrarily divided into small patches ( $\geq 5$  cm) and

large patches (> 5cm). Neuritis was defined in terms of motor nerve damage as evidenced by a weak VMT score ( $\geq 4/5$ ). 92 patient charts were analysed (TT 4, BT 43, BB 2, BL 34 and LL 9). Overall it was observed that neuritis was present in 135 nerves. Out of this 126(93.3%) had associated patches over the trunk nerve. 65 (51.6%) of them were large patches and 61(48.4%) were small patches. 19 of the patients also had type I reaction. In these 19 patients 37 nerves were involved as result of the RR in the overlying skin patches. This association between the presence of skin lesions and the development of neuritis was highest in the ulnar nerve followed by the lateral popliteal nerve, facial nerve and median nerve.

### PCA 149

#### THE EFFECT OF THE ACTIVITY OF MICROSOMAL ENZYMES AND ACETILATION ON METHEMOGLOBIN RATE IN LEPROSY PATIENTS

V.Z. Naumov, V.P. Tsemba, E.A. Zadneprovskaya; Leprosy Research Institute, Astrakhan, Russian Federation

As it is known, dapsone at certain doses may induce hemolysis, especially in persons with glucose-6-phosphate dehydrogenase (G6PDH) deficiency, occurring in about 10% of leprosy patients. However, DDS-induced hemolysis might be due to other factors among which peculiarities and intensity of drug metabolism, including rate of sulphone acetylating and hydroxylation, play an important role. Patients with lepromatous leprosy were given various schemes of MDT with dapsone 100 mg daily as a main component. Activity of microsomal enzymes by the time of antipyrine half-secretion (T<sub>1/2</sub>) and acetylation rate of sulfadimazine was studied. All the patients studied had no G6PDH-deficiency. It was observed that in patients showing rather high activity of microsomal enzymes (T<sub>1/2</sub> =12,5 h in average) blood methemoglobin rate was significantly higher (P<0,05) than in those with low activity of these enzymes (T<sub>1/2</sub>=23,5 h in average). Though methemoglobin rate in the most patients did not exceed 1,5%, it approached 2,5-3,9% in persons with a combination of low acetylating rate and high activity of microsomal enzymes. It might be a consequence of increase in derivatives of N-hydroxylation of dapsone with methemoglobin-forming properties in persons with predominance of oxydative phenotype of xenobiotic biological transformation.

### PCA 150

#### THE FOLLOWING OBSERVATION FOR EFFECT OF 251 LEPPER CASES IN THE MONITOR PRIOD AFTER MDT

LI Long

Shangrao station for dermatosis and venereal disease control, 334000, Jiangxi, China

**Objection:** analysis 251 leper cases which is cured jointly and finish monitoring the observation of curative effect from clinicopathology, bacteriology, histopathology. Ways: We analysis comprehenly from clinicopathology, bacteriology, histopathology according to 251 leper cases which is cured jointly and the changes of curative effect in the monitor period. Conclusion: The rate of basically curing in clinical reaches 81.27%. The marked progress and the common progress are 18.73% after the course. The MB rates of basically curing in clinical, which are monitored 5 years, have reached 88.85%. The PB has been cured after their monitor period of five years.

The evaluation of bacteriology: The average BI about 2.80;  $\Delta$ 1.5 of 118 cases of MB has come down to 65 cases after the course.. It covered 55.08% of all and decreased 0.98 average annual. The BI of 48 cases of PB, which infected covered 39.33%, has come down to 32 cases, covered 66.67% of all, and the decrease rate of bacteria was 60% after course. The BI of MB has come down to 87 cases, covered 73.73% of all and decreased 0.09 average annual after finishing monitoring in 3 years later. The BI of 45 cases of PB has come down to zero, covered 93.75% of all after monitoring in 3 years later. They all revered after finished monitoring 5 years later. The 103 cases of MB has come down to zero, covered 87.29% of all, decreased 0.11 average annual after finishing monitoring 6 years later. The bacteria revered after finishing monitoring 10 years later.

The curative effect evaluation of histopathology: we cured 103 cases and it covers 41.04% of all. 73 case of curing nearly covered 29.08% of all. 75 cases have gone down partly and greater partly and it covered 29.88%. The rate of curing and nearly curing reached 86.26% after monitoring 3 years later. 32 cases have gone down in early period, middle period and later period and it covered 13.74%. The rate of curing and nearly curing has reached 94.35% after monitoring 6 years later. 13 cases have gone down incompletely and it covered 5.65% of all. They all revered after monitoring in 10 years.

The indication of the article is that jointly curing is the best clinical curative effect to PB and MB, and the plan of jointly curing is the best valuable and feasible way to control leprosy according to changes of the bacteriology and histopathology.

[**Key words**] Leprosy, MDT BI, Histopathology, Curative effect

### PCA 151

#### THE REPORT FOR THE SKIN SMEARS QUALITY CONTROL ON LEPRESY IN SICHUAL PROVINCE IN THE PAST 15 YEARS

WANG Rongmao LIU Xueming ZHENG Yiqiang  
YU Linchong

Sichuan Institute of Dermatology, Chengdu, 610031,  
China

The skin smears quality control on leprosy was implemented in the leprosy epidemic counties in Sichuan Province, in order to improve the quality of skin smears and implementation of MDT. 10% of skin smears, came from the leprosy epidemic counties, were selected randomly with double-blind method and evaluated in smears, stain and diagnosis in Sichuan Leprosy Laboratory on the basis of the criterion of the skin smears quality on leprosy in the Handbook of MDT on Leprosy. Meanwhile, the skin smears came from Sichuan Leprosy Laboratory were also checked and contrasted by the paramedical workers. In the past 15 years, the skin smears quality control was implemented and the quality of skin smears was improved between 17 and 97 leprosy epidemic counties in Sichuan. 4529 pieces of skin smears were checked. The average qualified rate of smears, stain and diagnosis was 96.88%, which was 86.97% in 1986. The implementation of skin smears quality control could improve professional level of paramedical workers and the quality of leprosy control

### PCA 152

THE REPORT OF HISTOID LEPRONA 1 CASE

ZHANG Jianlin, HUANG Ganjun, LIAO Yanzhen,  
*et al.*

Hezhou Skin Hospital, 542800 Hezhou, Guangxi,  
China

A sick man is fifty years old. He has been sick for four years. The clinical appearance is just like a drunk with universal infiltrated lupus, various sized and shaped nodules. There is a "fointed met" which like a hemisphere in each of the elbow joint. He has "ape-hands," elcosis at the bottom of his feet. Shallow nerve is bulky all over the body. *Mycobacterium leprae* is found from the eruption (2+–5+). Pathological diagnosis conform to HL.

**Key words** LLp HL

### PCA 153

THE USE OF PILOCARPINE TEST FOR DIFFERENTIAL DIAGNOSIS BETWEEN TUBERCULOID LEPROSY AND GRANULOMATOUS DISEASES

Authors: Miranda, J.A.P.P.; Chumpitaz, S.A, Lyra, M.R.; Lima, R.B.; Valle, H.A., Coutinho, Z.; Nery, J.A.C.; Lowy, G.

Dermatology Department of Gaffrée e Guinle University Hospital; Leprosy Laboratory/IOC-FIOCRUZ, Rio de Janeiro, Brazil.

**Background:** Tuberculoid leprosy is often easily diagnosed on clinical aspects, but in some situations the signs and symptoms are not clear enough bringing difficulties and consequently delayed diagnosis, which may facilitate the installation of chronic disabilities. For this reason, the use of complementary procedures becomes fundamental for early diagnosis.

**Subject and methods:** we have studied six patients presenting a long term unique lesion suggesting granulomatous diseases in which several tests were made to elucidate the diagnosis. All of the patients had had previous topical treatments without improvement.

**Results:** the patients were between the ages twenty-eight and sixty-nine years, five of them were female, three were white and three were dark skin colored. All of them presented with infiltrated erythematous annular lesions with a variable course from two months to three years. The histopathological examination's findings were unspecific granulomatous inflammation. Four patients with facial lesions had incomplete pilocarpine test on suspected area. All of the six patients who receive paucibacillary therapy achieve great improvement.

**Conclusions:** pilocarpine test seems to be a very helpful complementary diagnostic method when differential diagnosis between Tuberculoid leprosy and other granulomatous diseases is not possible through clinical and histopathological examinations.

### PCA 154

TRABALHO EM UMA COMUNIDADE DE EX-HANSENIANOS COM INTEGRIDADE DA PELE PREJUDICADA E COM ISOLAMENTO SOCIAL

Noêmi Garcia de Almeida Galan

Instituto Lauro de Souza Lima (ILSL) – Bauru – SP-  
Brasil.

Trabalho do enfermeiro desenvolvido há 4 anos em uma comunidade que possui um grupo de pessoas com seqüelas da Hanseníase caracterizadas por úlceras crônicas.

**Objetivos:** Identificar os fatores interferentes na recuperação da integridade da pele prejudicada relacionada a seqüelas da hanseníase caracterizados por úlceras em MMII. Campo de trabalho e instrumentos utilizados: desde 1997; em Bauru/SP- Centro Comunitário do Parque Santa Terezinha, 27 adultos com seqüelas de Hanseníase (úlceras de MMII); compromisso social do Instituto Lauro de Souza Lima (fornecedor de material); teoria do autocuidado de Orem; Histórico, diagnóstico, intervenção e evolução de enfermagem.

**Resultados:** o trabalho permitiu a investigação de vários fatores interferentes na cicatrização das úlceras crônicas. Esses foram agrupados nos seguintes diagnósticos de enfermagem propostos por NANDA (North American Nursing Diagnosis Association): 1-Integridade da pele prejudicada. 2-Risco para Integridade da pele prejudicada. 3-Isolamento social. 4-Perfusão tissular alterada periférica. 5-Risco para infecção. 6-Nutrição alterada menos do que as necessidades corporais. 7-Risco para trauma. 8-Integridade tissular prejudicada. 9-Mobilidade física prejudicada. 10-Andar prejudicado. 11-Intolerância a atividade. 12-Dor crônica. 13-Medo. 14-Disfunção sexual. 15-Processos familiares alterados. 16-Enfrentamento comunitário ineficaz. 17-Controle ineficaz do regime terapêutico. 18-Déficit de atividades de recreação. 19-Distúrbio da imagem corporal.

**Conclusão:** a cicatrização das úlceras crônicas constitui um grande desafio aos profissionais de saúde em decorrência da imensidade dos fatores interferentes.

### PCA 155

TREATMENT OF MILD SENSORY IMPAIRMENT IN LEPROSY: A RANDOMISED CONTROLLED TRIAL (TRIPOD 2)

W.H. van Brakel, A.M. Anderson, S.G. Withington, R.P. Croft, P.G. Nicholls, J.H. Richardus, W.C.S. Smith

TLM Research Resource Centre, 5 Amrita Shergill Marg, New Delhi – 11003

**Aim:** To investigate whether leprosy patients diagnosed with mild sensory impairment have a better prognosis when treated with steroids than similarly impaired patients treated with placebo.

**Methods:** A multicentre, randomised, double-blind, placebo-controlled trial was conducted in Nepal and Bangladesh. Patients were eligible if they had a confirmed leprosy diagnosis, were between 15 and 50 years old, had mild sensory impairment of the ulnar or posterior tibial nerve of less than 6 months duration and did not require steroids for other reasons. 'Mild impairment' was defined as "impaired on the Semmes-Weinstein monofilament (SWM) test, but testing normal on the ballpen sensory test". Subjects were randomised to either prednisolone treatment starting at 40 mg per day, tapering over 4 months, or placebo. Nerve function was monitored monthly. Any patient who deteriorated was taken out of the trial and was put on full-dose steroid treatment. Outcome assessment was done at 4, 6, 9 and 12 months from the start of the treatment. Outcome measures were the proportion of patients needing full-dose prednisolone and the SWM sum scores. Each patient contributed only one nerve to the analysis.

**Results:** 75 patients had nerves eligible for analysis, of whom 41 (55%) and 34 (45%) were allocated to the prednisolone and placebo arms, respectively. At 4 months, 3 patients in the prednisolone arm (7%) and 6 in the placebo arm (18%) had an outcome event requiring full dose steroids. At 12 months, these proportions had almost reversed, 11 (27%) and 6 (18%) in the treatment and placebo arms, respectively. In the latter group, 15 (44%) recovered completely without treatment.

**Conclusions:** Treatment of mild sensory impairment of the ulnar and posterior tibial nerves with prednisolone does not improve the long-term outcome in terms of recovery, nor does it reduce the risk of leprosy reactions or nerve function impairment beyond the initial 4-month treatment phase.

### PCA 156

TREATMENT WITH CORTICOSTEROIDS OF LONG-STANDING NERVE FUNCTION IMPAIRMENT IN LEPROSY: A RANDOMISED CONTROLLED TRIAL (TRIPOD 3)

J.H. Richardus, S.G. Withington, A.M. Anderson, R.P. Croft, P.G. Nicholls, W.H. van Brakel, W.C.S. Smith

Department of Public Health, Erasmus University Rotterdam, P.O. Box 1738, 3000 DR Rotterdam, The Netherlands

**Aim:** Some leprosy patients with long-standing nerve function impairment (NFI) appear to have responded favourably to treatment with corticosteroids. This study investigated whether patients with untreated NFI between 6 and 24 months duration and who are given standard regimen corticosteroid therapy, will have a better treatment outcome than a placebo group.

**Methods:** A multicentre, randomised, double-blind placebo-controlled trial was conducted in leprosy control programmes in Nepal and Bangladesh. Treatment with prednisolone started with a dose of 40 mg/day, tapered by 5 mg every 2 weeks, and completed after 16 weeks. Outcome assessments were at completion of treatment at 4 months, and at 6, 9, and 12 months after the start of treatment.

**Results:** A total of 92 MB patients on MDT were recruited, of which 40 (45%) received prednisolone and 52 (55%) placebo treatment. No demonstrable additional improvement in nerve function, or in preventing further leprosy reaction events was seen in the prednisolone group. Overall, improvement of nerve function at 12 months was seen in about 50% of patients in both groups. Analysis of sub-groups according to nerve (ulnar and posterior tibial), duration of NFI, and sensory and motor function, also did not reveal any differences between the treatment and placebo groups.

**Conclusion:** The trial confirms current practice not to treat long-standing NFI with prednisolone. Spontaneous recovery of nerve function appears to be a common phenomenon in leprosy. Leprosy reactions and new NFI occurred in a third of the study group, emphasising the need for regular nerve assessment.

### PCA 157

#### ULCERATED LESIONS IN LEPROSY

Solange M. Maeda, Marcos C. Floriano, Alessandra Yoradjian, Jane Tomimori-Yamashita

Department of Dermatology - UNIFESP- Escola Paulista de Medicina

Erythema Nodosum Leprosum (ENL) or type II reaction is believed to be an immune complex reaction seen in multibacillary leprosy in which the dead bacilli and their products react with antibody in the tissue or blood. Although ENL occasionally develops in untreated patients, it occurs more commonly after

initiation of therapy. This presents most commonly as small papules or larger nodules which are painful and tender to touch. In some cases they may ulcerate, and the histological analysis may show vasculitis pattern affecting superficial and mid-derma vessels, leading to epidermal necrosis, bulla formation and ulceration. Therefore it has been proposed that ENL is a manifestation of immune-complex-mediated vascular injury. A clinical and histopathological overview of ulcerated lesions in lepromatous leprosy patients will be presented. These patients had necrotizing lesions on the limbs similar as described in "Lucio's phenomenon" and also acute constitutional symptoms. The Lucio's phenomenon is observed in diffuse nonnodular lepromatous leprosy most commonly in Mexico and Central America. Histopathologic studies of Lucio's phenomenon have shown leucocytoclastic vasculitis, endothelial cell proliferation, thrombosis, ischemic necrosis. Is Lucio's phenomenon and Type II reaction a unique variant of cutaneous vasculitis separated only by distinctive clinical settings?

## EPIDEMIOLOGY

### PE 1

#### A ENDEMIAS HANSÊNICA NO NOROESTE DO ESTADO DE SÃO PAULO

Ferreira, E.A.R.; Mencaroni, D.A.; Oliveira, M.H.P.; Pinto Neto, J.M.; Villa, T.C.S.

Escola de Enfermagem de Ribeirão Preto/ Universidade de São Paulo

Av. Bandeirante, 3900. Campus Universitário – Ribeirão Preto – CEP 14040-902 São Paulo. Brasil.

O Brasil após onze anos da implantação da MDT ocupa a segunda posição mundial em relação a prevalência com 4,6 casos /10 mil habitantes. A distribuição da endemia é irregular. O estado de São Paulo, considerado um dos mais desenvolvidos do país, apresenta uma prevalência de 1,6 casos/10 mil habitantes. Há regiões dentro desse estado com prevalências maiores, como por exemplo a região noroeste. Essa região serviu de cenário para esse estudo descritivo, tendo como objetivo analisar a endemia de acordo com alguns indicadores. Foram analisados dados epidemiológicos do período de 1994 a 2001 de 99 municípios totalizando 1.311.763 habitantes (76,9% dos municípios com até 10 mil habitantes) que compõem uma das 24 regiões administrativas da Secretaria de Estado da Saúde de São Paulo, denominada Direção Regional de Saúde XXII. Em 2001, o coeficiente de detecção variou de

zero (47,5% dos municípios) a municípios com 10 casos/ 10 mil habitantes. O coeficiente de prevalência variou, no período, de 6,58 a 2,40 casos/10 mil habitantes, encontrando municípios acima de 10 casos/ 10 mil habitantes. As formas clínicas polarizadas representam atualmente mais de 80% dos casos. Do total dos casos, 95% estão em MDT. Há necessidade de intensificação das ações de controle na região, especialmente o diagnóstico precoce.

### PE 2

#### A MULTICENTRIC TRIAL FOR TREATMENT OF 2-5 LESIONS PB LEPROSY WITH SINGLE DOSE OF ROM

M.D. Gupte, B. Nagaraju, S. Balasubramaniam, V.N. Mahalingam, S. Anitha, K. Sarojamma, S.V. Subbaroyulu, N.K. Nanda, Margery Emmanuel, Jayarama and Subbaiah

National Institute of Epidemiology (ICMR), Chennai –31, Tamil Nadu, India Chennai & CLT&RI in Tamil Nadu.

Our experience in conducting a multicentric trial for treatment of 2-5 lesions PB leprosy with single dose of ROM and under programme conditions is discussed. This study is a double blind randomized controlled clinical trial.