

CURRENT LITERATURE

It is intended that the current literature shall be dealt with in this department. It is a function of the Contributing Editors to provide abstracts of all articles published in their territories, but when necessary such material from other sources is used when procurable.

[MAROC MEDICAL] Special number devoted to leprosy. Maroc Medical **36** (1957) 1007-1236.

This publication presents a symposium of invited papers from writers of countries and regions other than Morocco, all translated to French. To say how many of them present original matter would require detailed examination which would not be possible. The following list of authors and titles is complete; abstracts of several of the articles are included in this department.

ROLLIER, R. Avant-propos.

DOULL, J. A. L'éradication de la lèpre est-elle possible?

SOUZA CAMPOS, N. Les conditions qui déterminent la positivité de la réaction de Mitsuda.

MONTESTRUC, E. La surveillance des enfants contacts de lépreux dans la prophylaxie antilépreuse.

BASSET, A. Les problèmes médico-sociaux dans la lèpre.

GATÉ, J. et ROUSSET, J. Orientation actuelle de la chimiothérapie antilépreuse.

LECHAT, M. F. Le traitement de la réaction lépreuse. Revue de la littérature et données actuelles.

FLOCH, H. et MAILLOUX, M. Le traitement de la lèpre par les sulfones et plus particulièrement la sulfone-mère.

BUU HOÏ, N. P. Les médications chimiques antilépreuses récentes autres que les sulfones.

LAVIRON, Méd.-Col. Les médicaments antilépreux. Le traitement de la lèpre dans une campagne de masse.

ROLLIER, R. L'association Salsepareille rouge—D.D.S. dans le traitement de la lèpre lépromateuse. Etude de 73 cas.

ROLLIER, R. et REBOUL, F. Traitement de six cas de lèpre lépromateuse par la D-Cyclosérine.

PELBOIS, F. Diagnostic différentiel de la maladie de Hansen.

CHENEBAULT, J., LÉPAPE, J. et ROLLIER, R. Les manifestations pulmonaires au cours de la lèpre. Etude radio-clinique.

ROUSSY, J. Aspects radiologiques des extrémités osseuses dans la lèpre.

GALLET et DURIX. Lèpre oculaire.

SARROLA, A. La lèpre en O.R.L. Considérations cliniques.

NOURY, M. Contribution à l'étude du bacille de Hansen.

BRU, R. et ROLLIER, R. La ponction biopsie du foie dans la lèpre. Etude de 38 cas traités ou non traités.

ROLLIER, R. Essai d'interprétation des fausses séro-réactions dans la lèpre.

SECRET, E. Propos sur l'histoire de la lèpre au Maroc.

CONTRERAS, F. et ARCE, M. La lèpre dans l'ex-zone espagnole du Maroc.

ORUSCO, M. Prophylaxie et dépistage de la lèpre en milieu marocain.

- ✓ BASOMBRIO, G. La enseñanza de la leprología y la profilaxis de la lepra. [Teaching of leprology and control of leprosy.] *Leprológia* **2** (1957) 1-3 (editorial).

[This discourse is not of a sort which readily lends itself to summarization except in the most banal form. The original should be consulted by anyone interested.—EDITOR.]

- ✓ LOPEZ OLACIREGUI, J. M. Consecuencia no prevista del Artículo 17 de la Ley 11,359. [Unforeseen effect of Article 17 of Law 11,359.] *Leprológia* **2** (1957) 33-37.

A discussion of the effects of prohibition of marriage by persons with leprosy.—G. BASOMBRIO

- ✓ ARGÜELLO PITT, L. AND CONSIGLI, C. A. La lepra en la provincia de Córdoba (1906-1956). [Leprosy in the Province of Córdoba (1906-1956).] *Leprológia* **2** (1957) 38-42.

Although the data for Córdoba are far from accurate, they indicate that between 1906 and 1956 the endemicity of leprosy in the province has increased, from 60 to 1,082 patients born there. The endemic index is now 0.7/1000 (or 0.8/1000 counting 199 cases imported from other provinces. In the San Justo department alone the increase has been from 61 known patients in 1941 to 279 now, the endemic index increasing from 0.5/1000 to 23/1000 of 121,500 inhabitants, one of the highest rates in the country.—[From authors' summary, supplied by G. Basombrio.]

- ✓ WORSFOLD, J. T. A survey of leprosy amongst the Lovale tribe in the upper Zambesi basin, Northern Rhodesia. Part I. *Central African J. Med.* **3** (1957) 359-363. Do. Part II. *Ibid.* pp. 401-406.

An account is given of a health survey in the upper Zambesi basin of Northern Rhodesia, with special reference to an epidemiologic study of leprosy. The social and health conditions of the people are primitive. They have no inhibitions regarding leprosy, and after gaining their confidence there was no difficulty in including the entire population in the survey. The recommendations of the Madrid Congress regarding minimal epidemiologic data were used as a model. Among 20,148 people, 240 cases of leprosy were found (11.85 per 1,000). The sex distribution is of particular interest. Although there were 824 fewer males in the population than females, the females with leprosy exceeded the males by 26. Up to the age of 29 the males numbered 14 and the females only 5, but in the next three decades there were 95 females and only 55 males, because adult males tend to go off in search of employment and adventure. Two-thirds of the patients had a near relative with the disease, an uncle or aunt more often than a parent, probably because of the promiscuity of life. The type rates were: tuberculoid, 60.8%; lepromatous, 23.7%; indeterminate, 13.7%; and borderline, 1.7%. In 46.3% there was clinical nerve involvement. The onset of the disease is seldom acute or subacute.—[From abstract in *Trop. Dis. Bull.* **55** (1958) 167.]

- ✓ CASTRO SOARES, A. La lutte anti-lépreuse et l'hygiène mentale. [The antileprosy campaign and mental hygiene.] *Bol. Serv. Saúde Pública (Lisbon)* **3** (1956) 377-390.

The author refers to the problems raised by persons with leprosy and to the endless and painful series of emotional suffering, problems of conscience, and psychologic complexes resulting from such a situation, and to the ups and downs of the mental health of patients and their families. He speaks of assistance jointly rendered by leprologists, psychologists and psychiatrists, and quotes the opinion of the WHO experts that it is imperative to put mental hygiene into practice in its preventive aspects according to

psychoanalysis and psychosomatic medicine. The person with leprosy should be seen as a whole, and "the public health services exist in order to prevent disease and fight against it, and they should accept responsibility for the total health of their patients" (Buckle, of WHO). In the field of leprology, mental health is very important and requires the generalized practice of psychosomatic medicine so as to ensure better and more beneficial assistance to the patients.—A. SALAZAR LEITE

GALEA, J. AND BONNICI, E. Leprosy in Malta. *Leprosy Rev.* **28** (1957) 139-147.

The history of leprosy in Malta is traced, and former and more recent methods of control are discussed. It is supposed that leprosy was first introduced by the Saracens during their domination (870-1090 A.D.); that its prevalence was increased by the return of emigrants from North Africa who had gone there during a time of economic depression in Malta; and that it was further supplemented by the stationing of Indian troops on the island during the Russo-Turkish war in 1878. By 1659 the disease had become so common that the Grand Master of the Order of Malta appointed a commission to provide for the victims. About 1893 compulsory segregation was undertaken, and a leprosarium was completed 1900-1912. In 1919 provisions were made whereby disease-arrested patients could be discharged, and in 1929 outside treatment of noninfectious patients was provided for. In 1913 the prevalence index was 0.54 per thousand, and in 1930 it was 0.34, but the latter figure did not include paroled or noninfectious cases. The total number registered in 1956 was 144 (0.45 per thousand). The lepromatous rate was 66%, and the child rate in 534 cases reported since 1920 was 3%. Compulsory segregation has now been abandoned.—[From abstract in *Trop. Dis. Bull.* **55** (1958) 48.]

DUPERRAT, B. Lettre de Saïgon. [Letter from Saïgon.] *Ann. Derm. et Syph.* **84** (1957) 279-285.

During a stay at the University of Saïgon the author acquainted himself with the dermatologic conditions seen there and with the leprosy situation. That is the most important question, which "it would be vain to minimize and which will necessitate a vast medico-social campaign." Indicating its seriousness, among new clinic patients he found 15% to have leprosy, many of them children and adolescents. The universal native practice of scarifications is especially pernicious in this connection, but the author agrees with Chaussinand that infection is usually indirect, since familial cases are few. The incipient cases are especially interesting, showing an infinite polymorphism. The author had started testing all leprosy patients by intradermal injection of silica (talc) suspended in saline, the nodule being excised on the 30th day for examination. The object of this artificial provocation of a "silicotic granuloma" was to observe the differences in the tissue reactions in the different types of patients with leprosy. Silicotic granuloma is not likely to develop in healthy persons, whereas it does so readily in persons with sarcoid and, perhaps, fibrous tuberculosis. The future will tell if this harmless exploration is of any use.

—H. W. W.

KITANO, H. Epidemiological studies of leprosy in Gifu Prefecture. I. Occurrence of new cases. *La Lepro* **26** (1957) 326-336 (in Japanese; English abstract).

A total of 294 cases of leprosy was discovered in Gifu Prefecture (Central Japan, north of Aichi Prefecture) in the 20-year period between 1936 and 1955. The annual incidence was 0.4-2.5 per 100,000 population. The first half of this period was a time of confusion, and the rate of discovery of new cases was low. Though there was no great increase during the war as had been feared, there was a cessation of the previous downward trend. After the war group leprosy examinations were conducted at frequent intervals, and the rate of discovery rose. A sharp drop, however, has been observed since 1952. A breakdown according to type shows that there were 61% lepromatous, 16% macular [tuberculoid], and 23% neural cases, but the recent trend shows a decrease in lepromatous and an increase in macular cases. There has been a gradual rise

in the age factor. The average age at which the patient was first seen was 32.4 in the period 1936-1940, and 40.5 in 1951-1955; the age of onset was 26.5 in 1936-1940, and 38.3 in 1951-1955. By sex, there were 165 females for each 100 males. Seventy-eight per cent of the patients agreed to confinement in the leprosarium, and the average length of wait between discovery and hospitalization was somewhat less than one year, so the time from onset to hospitalization was about 3 years.—[From the English abstract.]

RODRIGUEZ, J. N. Leprosy control in the province of Cebu. *J. Philippine Med. Assoc.* **33** (1957) 444-450.

The province of Cebu is the most important focus of leprosy in the Philippines. During the first 25 years of the Culion Sanitarium—the only place of isolation then—over 50% of all admissions came from Cebu. The first regional leprosarium in the Philippines was established at Cebu in 1927. This was located in the old Carreta Leper Hospital until the Eversley Childs Sanitarium in Mandawe (present capacity, 1,700), was built for the government in 1930 by the Leonard Wood Memorial, which organization also provided a permanent outpatient clinic in Cebu City, for detecting and treating early cases. Case finding and follow-up of the treatment was accelerated by the establishment of a Traveling Skin Clinic in 1955. With these facilities there is now a well-balanced leprosy control program in the province. A table shows that, by municipalities, the prevalence has varied from 0 to 7.2 per thousand. Admissions from Cebu averaged 5,290 per year for the period 1904-1929, and 2,882 for the equal period 1930-1955, a reduction of 54%. Reductions were most marked in those towns where the prevalence was highest. Advancement of the disease in newly-admitted cases is now much less than during the earlier decades, when segregation was more strictly enforced than now. Furthermore, over 95% of all new admissions to Eversley Childs are voluntarily presented cases. The control program in the province of Cebu is being intensified, especially in Cebu City, an important focus. The author proposes to make this Cebu program a demonstration of his basic concept that "treatment is now the basis of leprosy control, and it should be extended immediately to all cases wherever they may be found provided that such treatment can be maintained until they become non-contagious, and that early voluntary presentation of cases is encouraged at all times."—J. O. NOLASCO

FERNANDEZ, J. M. M., CARBONI, E. A. AND FERNANDEZ PODESTA, T. A. Valor del aislamiento en la profilaxis de la lepra. [Value of isolation in the control of leprosy.] *Leprológia* **2** (1957) 18-26.

The authors discuss the failure of the antileprosy campaign observed in some countries, and conclude that one of the factors of failure is indiscriminate, strict and indefinite segregation. The fight against leprosy should be made more humane by (1) making isolation selective and temporary for the bacillus-positive cases, (2) giving intensive treatment to all known cases, and (3) strict control and protection of contacts. They support the present tendency to regard leprosy as a common infectious-contagious disease, and to gear its treatment and control according to this orientation.—[From authors' summary, supplied by G. Basombrio.]

COMPÁ, F., FERNANDEZ, J. M. M. AND LOIAZA, E. G. Vigilancia de los convivientes con un foco de lepra. [Surveillance of leprosy contacts.] *Leprológia* **2** (1957) 27-32.

By the examination of contacts, especially those who have been followed up since birth, the authors have established the period of 3-1/2 years for the average incubation of leprosy, with rare extremes of 1 year and 5-1/2 years. The shortest periods apply to cases whose resistance is manifested in the tuberculoid form. The examinations are thorough, and in cases of doubt the histamine test is made and lesions are biopsied. Lepromin testing is routine. When the early reaction is frankly positive, the reading of the late one can be dispensed with. Factors which determine the strictness of the surveillance are: Contact with an open case, 32.2% infection. Degree of contact: Four times greater in the same house than in the total population, and 10 times greater with the lepromatous forms among the infected ones. Age: Higher in children (35%) than

in adults (10%, conjugal). The value of the immunology is much more important than the clinical examination. The immunologic response sets the pattern of the manner and time of surveillance. If positive, 5 years is more than enough, with yearly or biennial examinations of the strong reactors. With poor reactors and negatives BCG vaccination is necessary, or any other means of positivization. If the individual is not removed from the contact, it is advisable to examine him every 6 months regardless of lepromin positivity, as negatives are followed up. If the attempt to induce positivity fails, preventive treatment should be given repeating the test every 3 or 6 months.

—G. BASOMBRIO

MACGREGOR, H. Familial leprosy. *Leprosy Rev.* **28** (1957) 66-67.

A Land Dayak suffering from leprosy was admitted to the settlement at Kuching, Sarawak, in 1936. After a year he returned home, but was readmitted as a bad nodular case in 1950. In 1956, 6 of his family of 10 were found to be suffering from leprosy, although only 1 had positive smears. Those affected were the wife and 5 children ranging from 11 to 20 years of age.—[From abstract in *Trop. Dis. Bull.* **54** (1957) 828.]

COCHRANE, R. G. AND KHANOLKAR, V. R. Dimorphous polyneuritic leprosy. *Indian J. Med. Sci.* **12** (1958) 1-9.

The authors describe 5 patients seen in different clinics who complained of anesthesia and whose condition was diagnosed as polyneuritic leprosy. They all complained of numbness and showed no other cutaneous manifestation. Biopsy specimens taken from subcutaneous nerves showed large numbers of leprosy bacilli. The histologic structure was neither wholly tuberculoid nor wholly lepromatous in nature, but suggestive of a dimorphous type of leprosy. The authors believe this dimorphous type is more widespread than has been suspected. As in lepromatous and tuberculoid leprosy, so also in the dimorphous group there are clinical signs that manifest themselves not only as infiltrated lesions but also as macules and polyneuritic signs. These polyneuritic manifestations occur also in the two main types of leprosy, although they are rare in the lepromatous variety. This may be because the initial pure neural stage in lepromatous leprosy is so transient that it is hardly recognized. A close study of leprosy among the Mongolian races may reveal the existence of polyneuritic lepromatous leprosy. The authors suggest that the dimorphous, neuritic, or polyneuritic cases is a clinical entity and should be included in any detailed classification of leprosy. All clinical manifestations of leprosy (macular, infiltrated, or polyneuritic) have a dimorphous phase.—[From *J. American Med. Assoc.* **167** (1958) 371, Foreign Letters.]

[The following definition is quoted from the report of the Subcommittee on Classification of the Cairo Congress, as recorded in *THE JOURNAL* **6** (1938) 389-397. "Polyneuritis.—This term has been employed to designate involvement of the peripheral nerve trunks which results in sensory changes of the extremities that tend to spread centripetally ("Acroteric" anesthesia), and in trophic changes of various kinds, and paralyses and atrophies which may also involve the face. Polyneuritic manifestations do not include the sensory changes in the leprides, or lesions of superficial cutaneous nerves that develop by extension from leprides."

[It is not known that any subsequent congress has changed the meaning of the word, or intended to change it. At the Havana Congress the classification committee set up a "polyneuritic" variety of each of the accepted forms in the part of its report which was rejected [*THE JOURNAL* **16** (1948) 391], and the Madrid Congress did so but employed the term "neuritic, pure"—without definition or description.—EDITOR.]

MERKLEN, F. P., RIOU, V. AND PÉRARO, N. Début hansénien par une poussée réactionnelle purement névritique et périnévritique. [Onset of leprosy with a bout of purely neural and perineural reactional manifestations.] *Bull. Soc. française Derm. et Syph.* **64** (1957) 139-140.

A native of Guadeloupe presented a right cubital neuritis with impending clawing (*griffe*), and diminution of sensation in the area of the nerve. The left cubital and

cervical nerves were enlarged. In the skin, only some small papules appeared at the same time as the neuritis. Histologic examination of a papule showed an "indeterminate" structure. Search for bacilli in this specimen gave negative results, as did the nasal mucus and puncture fluid from the right cubital nerve. The Mitsuda reaction was negative. The case was therefore regarded as one of indeterminate leprosy, beginning with a neural outbreak accompanied by few skin elements.—M. VIETTE

D'ANGELO, J. M. *Leprosia que simula esporotricosis linfangítica*. [Tuberculoid leprosy simulating lymphatic sporotrichosis.] *Leprológia* **2** (1957) 66-68.

Report of a case of tuberculoid leprosy with nerve abscesses which simulated lymphatic sporotrichosis. The lesions were located in the cutaneous branch of the external popliteal sciatic nerve.—[From author's summary, supplied by G. Basombrio.]

JOSEPH, J. J. Foot-drop in leprosy. *Antiseptic* **54** (1957) 615-618.

Foot-drop in leprosy is mainly due to involvement of the lateral popliteal nerve (common peroneal) at the back of the head of the fibula. The leprous infiltration of the nerve, if localized, causes strangulation and ultimate degeneration of the nerve fibers. The anterior and lateral muscles responsible for dorsiflexion, eversion and abduction of the foot are supplied by this nerve. In the early stages injections of hydrocarpus oil, or its combination with its esters, may be given on the lateral and posterior aspects of the affected leg. Sulfones, particularly the parent drug (DDS), should be avoided. Vitamins of the B complex may also be given. Decapsulation of the affected nerve at the head of the fibula has been found to give unsatisfactory results except in early cases.—[From abstract in *Excerpta Medica* **12** (1958) 70.]

CONTRERAS, F. Secondary infections and neoplasms in leprosy patients. *Leprosy Rev.* **28** (1957) 95-107.

When patients with the diagnosis of leprosy are sent to the specialist he must keep in mind three possibilities: (1) Leprophilia, referring to persons who for some reason, e.g., to avoid separation from relatives who have leprosy, pretend they have the disease (seen in 5 out of 300 patients). (2) Mistaken diagnosis of various conditions (11 out of 803 patients, most frequently cancer of the face). (3) Various conditions which accompany leprosy and which may mistakenly be supposed to be caused by leprosy. Among these are the various parasitic dermatoses, filariasis, fungoid infections, pyogenic dermatoses, tuberculosis and syphilis. Various other conditions require differential diagnosis. About the question of whether or not leprosy affects the occurrence of cancer, various authorities differ in their opinions. Four cases of combined leprosy and cancer occurring in Spain are known to the author. "Infections and parasitic affections are probably more frequent among our patients than in the general population."—[From abstract in *Trop. Dis. Bull.* **54** (1957) 1320.]

CONVIT, J., REYES, O. AND KERDEL, F. Disseminated anergic American leishmaniasis. Report of three cases of a type clinically resembling lepromatous leprosy. *A.M.A. Arch. Dermat.* **76** (1957) 213-217.

In this brief report are presented 3 cases of a rare clinical variety of American leishmaniasis of the skin. This variety is called by the authors disseminated anergic, in view of the widespread extension of the many lesions and the negative response to the intradermal test with leishmanin. The clinical appearance of this form, which resembles lepromatous leprosy, its histologic and parasitologic characteristics, and its resistance to therapy are discussed. Four photographs are presented of one of these patients—2 of the face, showing a remarkable nodular condition which, however, might be distinguished from lepromatous leprosy without too much difficulty, and 2 of the back (and posterior upper arms) showing multiple abruptly-arising nodules of more or less pedunculate nature reminiscent of rare lepromatous cases, one of which the reviewer has been shown at Carville and one of which he has studied at Culion.—H. W. W.

DAVISON, A. R. Injectable sulphone. *Leprosy Rev.* **28** (1957) 148-149.

Avlosulfon soluble was tried on 10 tuberculoid and 17 lepromatous leprosy patients for periods extending up to 2 years. Of the tuberculoid patients, 9 were discharged within 3 to 13 months. Of the lepromatous patients, the average bacteriologic index dropped from 12.5 to 5.8; in controls on oral DDS it dropped from 12.6 to 8.8; on oral sulfone plus isoniazid it dropped from 14.9 to 9.5; on isoniazid plus streptomycin it dropped from 12.8 to 8.7; and on streptohydrazid it dropped from 12 to 9. The author is satisfied that the results with Avlosulfon soluble are as good as, if not better than, those with oral DDS, but this treatment has the disadvantage that it has to be injected intramuscularly (from 0.5 up to 1.5 cc. twice weekly), and many patients become "needle shy." Oral DDS is therefore preferred for routine use.—[From abstract in *Trop. Dis. Bull.* **55** (1958) 52.]

LAVIRON, P., LAURET, L., KERBASTARD, P. AND JARDIN, C. Traitement synergétique de la lèpre par des injections hebdomadaires de 600 mg. de D.D.S. en milieu chaulmoogrique. Activité particulièrement intéressante sur les formes pauvres en bacilles. [Synergistic treatment of leprosy with weekly injections of 600 mgm. of DDS suspended in chaulmoogra. Particular effectiveness in the forms with few bacilli.] *Bull. Soc. Path. exot.* **50** (1957) 97-107.

While the sulfones are very effective in the malign forms of leprosy, the results are more irregular in the benign forms which constitute 85-90% of cases under treatment in French West Africa. In tuberculoid cases better results were obtained by a combination of DDS and chaulmoogra, and finally it was decided to suspend 600 mgm. of DDS in a mixture of neutralized *Hydnocarpus wightiana* oil and esters with 4% guaiacol added, 6 cc. in all. Beginning with 2 cc., the dose was increased each week by 1 cc. up to 6 cc., and this dose was continued every week for a year. The injections were well tolerated locally. If reactions occurred in lepromatous or borderline cases, the treatment was suspended temporarily. Of the lepromatous cases, about 94% showed amelioration. In tuberculoid cases there was generally complete healing in 18-24 months. In the undifferentiated form there was great improvement in 95%. With the combined treatment only 1.6% remained stationary or got worse, compared with 6.7% on DDS alone and 6% on chaulmoogra alone. This combined treatment is not suitable for acute cases, but is particularly suitable for chronic cases, especially for those which have ceased to improve under DDS.—[From abstract in *Trop. Dis. Bull.* **54** (1957) 1089.]

HUGON, J. AND PIERON, A. Trois ans de traitement au D.A.D.P.S. en milieu rural. [Three years of treatment with DDS in a rural region.] *Ann. Soc. belge Med. Trop.* **37** (1957) 71-89.

The authors, working in the Belgian Congo, found oral DDS treatment to be best in hospitals, but unsuitable for mass dispensary treatment. Preference is given to injections of a suspension of DDS in chaulmoogra ethyl esters. After 700 patients had been treated with this preparation, in a dosage of 5 cc. containing 1.25 gm. of DDS, twice each month for a period of 3-1/2 years, 248 of them (192 indeterminate, 56 tuberculoid) were carefully examined. In about 40% there were striking cures, with complete disappearance of the eruptions and remarkable improvement in another 45%; but there have been relapses during the treatment. Among side effects there was a case of exfoliative dermatitis, one of hepatitis and one of agranulocytosis, all three being fatal. However, these accidents are not important drawbacks to the treatment, considering the slight medical supervision that was possible. The anemia seemed unimportant. Puncture biopsies of the liver showed changes in some cases which were ascribed partly to the treatment. It is stated that before the sulfone era the mortality among persons with leprosy was 10.7% per annum (a surprisingly high figure considering the benign form of leprosy in the Congo), against about 2% among the general population, but since then the rates have decreased steadily until the patients' rate is now about the same as that of the general population of the same age group.—[Partly from abstract in *Trop. Dis. Bull.* **54** (1957) 1197; partly supplied by A. Dubois.]

LAVIRON, P., LAURET, L., KERBASTARD, P. AND JARDIN, C. Le traitement de la lèpre par injections mensuelles de DDS. [Treatment of leprosy by monthly injections of DDS.] *Méd. Trop.* **17** (1957) 795-808.

Monthly injections of the parent sulfone in different vehicles was given to 107 leprosy patients for 8 to 40 months. (1) The first group, 56 patients, received monthly injections of 2.5 gm. of the parent sulfone suspended in a mixture of equal parts of chaulmoogra oil and ethyl chaulmoograte. Of the 30 lepromatous cases, 29 improved and 1 remained stationary; of the 20 tuberculoid cases, 15 improved, 1 remained stationary and 4 worsened; and of the 6 indeterminate cases, 4 improved, 1 remained stationary and 1 worsened. (2) The second group, 37 patients, was given 2 gm. of the parent sulfone suspended in an isotonic solution of saccharose with 0.2% agar. Of the 15 lepromatous cases, 14 improved and 1 remained stationary; of the 20 tuberculoid cases, 18 improved and 2 remained stationary; and of the 2 indeterminate cases, both improved. (3) The last group, 14 patients, was given 1.5 gm. of the parent sulfone in 0.2% agar solution. All of the 8 lepromatous cases improved, 4 of them markedly; and of the 6 tuberculoid cases all improved, 2 of them markedly. The authors prefer the 2 gm. injections in the saccharose-agar solution. This dose gives blood sulfone concentrations comparable with those following the injection of 2.5 gm. as described. The suspension in the saccharose solution keeps longer than one in saline.—M. VIETTE

LAVIRON, P., LAURET, L., KERBASTARD, P., JARDIN, C. AND PFISTER, R. Les injections hebdomadaires de thioacétazone en suspension chaulmoogrique dans le traitement de la lèpre. [Weekly injections of thioacetazone in chaulmoogra suspension in the treatment of leprosy.] *Méd. Trop.* **17** (1957) 809-814.

Weekly injections of 600, 750 or 900 mgm. of TB-1 suspended in 5 cc. of a mixture of equal parts of chaulmoogra oil and ethyl chaulmoograte were given to 46 leprosy patients for 8 to 50 months. The 750 mgm. weekly dose seems to be the most satisfactory. Because of its high cost, TB-1 cannot be used in place of DDS in mass treatment, but it may be beneficial for the few patients who are intolerant of the sulfones or in whom improvement is insufficient.—M. VIETTE

WHEATE, H. W. Thiosemicarbazone in the treatment of the reactional and borderline forms of leprosy. *Leprosy Rev.* **28** (1957) 124-129.

After recounting the experience of other workers with thiosemicarbazone in leprosy, the author says that there are certain patients, more frequent in East Africa than West Africa, who cannot stand the DDS treatment. Such cases which may be recognized before treatment is begun are of two types, both bacteriologically positive: (1) major tuberculoid with flat hypopigmented zones extending beyond the most raised portion of the patches, frequently with lesions involving the palms and soles, and the mucosa of lip, nostril or conjunctiva; and (2) reactional and borderline cases in which there are grossly raised plaque-like lesions, painful when pinched. On the other hand there are patients in whom recognition of intolerance to sulfone treatment has to be made after treatment has been begun. Such patients, either from the beginning of treatment or after severe reaction has occurred, should be put on thiosemicarbazone: 50 mgm. daily, 6 days a week for 2 weeks, then 100 mgm. for 2 weeks, and then 150 mgm. daily. When reaction has subsided, generally after 6 to 12 months, the patient may be transferred to DDS treatment.—[From abstract in *Trop. Dis. Bull.* **54** (1957) 1321.]

SCHUJMAN, S. Nuestro criterio sobre el valor terapéutico y ubicación de las tiosemicarbazonas (T.B.1) entre las medicaciones antileprosas. [Assessment of the therapeutic value of thiosemicarbazone (TB-1) and its inclusion among the antileprosy drugs.] *Leprológia* **2** (1957) 54-61.

The author's experience is that thiosemicarbazone is active during the first 3 years of treatment, but that later deterioration and exacerbation of the lesions occur in the majority of lepromatous cases. This is the drug resistance mentioned by Lowe. Thus the

author places this drug in third place, after the sulfones and chaulmoogra, with which it is exceptional to observe exacerbation of the disease during treatment. Consequently, he prefers not to use it as an exclusive medicament, but temporarily when there is intolerance to the other antileprosy drugs.—[From the author's summary, supplied by G. Basombrio.]

- ✓ ROLLIER, R. L'association salsepareille rouge-DDS dans le traitement de la lèpre lèpromateuse. Étude de 73 cas. [The combination of red sarsaparilla and DDS in the treatment of lepromatous leprosy; observation of 73 cases.] *Maroc Méd.* **36** (1957) 1106-1128.

Two similar groups of 73 lepromatous patients were treated with DDS in daily doses of 2 mgm./kgm. One of the groups received, in addition, tablets of a liquid extract of sarsaparilla. At the beginning 89% were bacillus positive [in the nose?]; after 6 months 64% of the patients receiving the mixed treatment were negative, and 25% of those receiving the sulfone alone. Smears of skin lesions, 98% positive at the beginning, changed to negative in 15% of those receiving the mixed treatment but only 4% of those receiving the sulfone alone. The albumin-globulin ratio and the Hanger test showed most improvement in patients under the mixed treatment; other tests (MacLagan, Vernes-resorcine and sedimentation rate) were less demonstrative. The author believes that the combination of sarsaparilla extract and sulfone in treatment significantly improved the results, and he recommends the use of this combination. —M. VIETTE

- PESTEL, M. AND CHAMBON, L. Traitement de la lèpre par la D-cyclosérine. Premiers résultats. [Treatment of leprosy with D-cycloserine; initial results.] *Presse Méd.* **65** (1957) 1791-1793.

D-cycloserine treatment, in 500-750 mgm. daily dose, was given to 7 leprosy patients (4 lepromatous and 3 tuberculoid). In the 2 tuberculoid cases treated long enough to show effects (8 months), there was improvement of skin lesions and decrease of the number of bacilli in them. —M. VIETTE

- ✓ ROLLIER, R. AND REBOUL, E. Traitement de six cas de lèpre lèpromateuse par la D-cyclosérine. Note préliminaire. [Treatment of six cases of lepromatous leprosy with D-cycloserine; preliminary note.] *Maroc Méd.* **36** (1957) 1129-1133.

D-cycloserine treatment in daily doses of 500-1, 250 mgm. was given to 6 lepromatous cases, all very advanced, for 7-10 months. All the patients showed significant regression of the skin lesions, and some of them more or less significant lessening of anesthesia. Bacilli in the nasal mucosa, positive in all before treatment, became negative in 3 cases and fewer in 2; also fewer in skin biopsies in 4 cases. At the beginning of the treatment 3 patients had reactions of short duration; two other patients had severe reactions during treatment, necessitating prolonged administration of cortisone. The authors believe that D-cycloserine is effective in leprosy, but that it cannot supplant the sulfones, although it can be combined with them. —M. VIETTE

- ✓ LI-SHENG, K., TSUN-YI, W., YU TA, YUEH-HSIEN, H. AND EN-HSI, S. Treatment of leprosy with Chinese drugs. A preliminary report of 309 cases. *Chinese J. Derm. (Peking)* **5** (1957) 8-12.

In the course of 9 months, 309 hospitalized leprosy cases of various types were treated with combinations of Chinese herbs, 13 prescriptions being tried. A prescription consisting of 30 different ingredients proved to be the most effective. Clinical improvement in various degrees occurred in 99% of the cases, obvious changes appearing after about 1 month. Results seemed to be better in the lepromatous than in the tuberculoid type. Histologic studies made after 5 months showed various degrees of improvement in 31 out of 38 cases (81.6%). Bacteriologically, 2-5 months after treatment the bacilli began to break down or disappear in 223 out of 267 cases examined (83.5%). Untoward reactions were few and not serious.—[From abstract in *Excerpta Medica* **11** (1957) 482.]