CURRENT LITERATURE

To take due notice of the current literature of leprosy is one of the most important objectives of the JOURNAL. For the benefit of readers to whom medical libraries are not readily accessible it is intended that, so far as possible, abstracts of the more important articles shall be sufficiently full and complete to afford a clear understanding of them, rather than merely of the nature of their content.

The Contributing Editors are depended upon primarily to provide these abstracts. However, since authors’ abstracts are generally to be preferred to those prepared by others, readers are invited to submit abstracts of recent papers or reports written by them which have been published elsewhere.


The bark of a legume, Cynometra eugnophyllum, common in certain regions of the Ivory Coast in the neighborhood of watercourses, is employed by the natives in the treatment of leprosy.


Preparations of the oils extracted from Coloscocha planus and C. auriculata from the Kribi region were employed. The formula used was: medium coloscocha, three-fourths saturated, 30 gm; antipyrin 25 gm; sucrose 47 gm; distilled water to 1,000 cc. Doses of 10 cc. for adults were injected every two or three days, without inconvenience.

RAYMANT, A. Droguess végétales employées au Brésil contre la lépre. [Drugs used in Brazil for leprosy.] Marseille Mèd. (1932) 397, Sept.

The interesting facts contained in this report are taken from an article published in The Prescriber, by Prisco Freid. The drugs used were: Carpotroche bimucronata, a well-known bactonacee; Casearia silvestris, racontanacee; Dioscorea leptophylla, bicornée; Homoea minor, apocynacee; Echinochene eucalypt, rhympotheriacee; Cosmaropsis ornithopus, mimosacee; Aschleria salutaris, violacee; Eustigma cytopediacs, ornithacee. For external application only, the

*[This and the following abstracts by the late Dr. Leger were received shortly before his death last year.—Editor.]
following are also used: *Johannesia princeps*, *naphorbiacae*; *Leccus glycyphorm*, *saponaria*; *Bauilla brevifolia*, *dilleniacae*; *Casala racemosa*, *convolvolaceae*; *Argemone mexicana*, *papaveraceae*; *Boedichia major*, *liguminaceae*. As Raynaud says, it may be that a true specific for leprosy will perhaps be found some day in a drug known only to the natives of the equatorial forest.

—M. Leger (translated).


Having in mind the treatment recommended by Hamesch, which consisted of a mixture of thymol and cod liver oil, the author at Shanghai treated patients in the manner described. For two weeks out of three he gave, on the first day: morning, 0.5 gm. each of thymol and camphor, and evening, 0.5 gm. terebinth; on the second day: morning, a tablespoonful of glycercine in water and 5 gm. of menthol. Cod liver oil was administered during the entire time.

—M. Leger (translated).


It is believed that the number of cases of leprosy existing today in Algeria does not exceed 15, while in 1923, at the time of the Strasbourg conference, there were according to Montpellier some 250, of which 100 were Spanish.

—M. Leger (translated).


This is a report of the case of a woman who was infected in France through contact with her sister, who had had ulcerating nodular leprosy and who had recently died in the asylum where she had been isolated. This sister also had never been out of France, and had denied ever having had contact with any known case of leprosy.

—M. Leger (translated).


This is a record of a case followed for two months. The ocular lesions were much ameliorated by *Hydnocarpus antelusianus*.

—M. Leur (translated).


The author points out that among the facts indicating the contagiousity of leprosy are (1) the diminution of fecundity of lepers, (2) the rapid extension of the disease under conditions excluding the factor of heredity (as in Hawaii, New Caledonia, the Marquises, and British Guiana), (3) the diminution or disappearance of the disease where it would be expected to increase if it were a hereditary disease, and (4) the results of separating the children of lepers from their parents at the time of birth. These children are especially liable to the infection; the author found among 100 of them 15 in which the bacillus was found or had been found, 3 others that were clinically infected, and 24 that were suspected of the infection. The separation of children should always be
advised, but this should be accomplished by persuasion and not by force. There should be set up institutions properly equipped for the artificial feeding of young infants. Precautions should also be taken in leperous countries for the protection of children and adolescents of non-leperous parents. For treating children, who react quite rapidly, Montel advises the use of the total ointment of chaulmoogra by mouth (method of Guilhem), and for injections the combination of chaulmoogra and the Morcote mixture (chaulmoogra oil, 40; camphorated oil 40, camphor 2). – M. Leger (translated).


The rat, susceptible to the bacilli of Stefansky, seems not to be affected by that of Hansen. No attempt had been made to inoculate a human being with rat leprosy until the author tried it, in a man with both skin and nerve lesions. The inoculation was followed by an increase of the acid-fast bacilli in sputum. These did not have the appearance of degenerated forms, but presented an appearance worthy of special note. There were found: (1) small forms recalling the "pulveriform" type observed by Marchoux in a leper from the Antilles, with which he was able to infect rats; and (2) regularly arranged globi identical with those of the Hansen bacillus. The lesions could not be reisolated from the man to rats. In the third month the lesions took on a manifestly invasive character. Intensive treatment by chaulmoogra ointment interrupted this. – M. Leger (translated).


The author grouped in a village (to which he gave the name Hansen), about 4 kilometers from Nola, 40 patients with their nearest relatives, making a population of about 100 people. This was done by persuasion, without any coercion, by demonstrating the benefits of treatment and the better conditions of life in the new village than in those in which they were living. The inmates were furnished the rations necessary to subsist them until the development of their own farms, for which they were given the seeds which would permit them to meet their own needs. The success obtained shows the influence which the colonial physician can exercise if he knows the mentality of the natives and can gain their confidence. – [From abstract in Bull. Mens. Off. Internat. d’Hyg. publ. 26 (1934) 1180.]


Many acid-fast bacilli, either living or dead, can persist for many months and produce in the tissues a certain degree of granulomatous change which may be mistaken for rat leprosy. Only Stefansky’s bacillus produces a steadily progressive and finally fatal infection. The author failed to produce rat leprosy by injection of the cultures isolated by Uchida and by Cienfuegos and North. Failure also attended efforts to grow the organism by the methods recommended by Ota and Amari, Walker and Sweeney, Soule and McKinley, and McKinley.

Current Literature

advised, but this should be accomplished by persuasion and not by force. There should be set up institutions properly equipped for the artificial feeding of young infants. Precautions should also be taken in leperous countries for the protection of children and adolescents of non-leperous parents. For treating children, who react quite rapidly, Montel advises the use of the total ointment of chaulmoogra by mouth (method of Guilhem), and for injections the combination of chaulmoogra and the Morcote mixture (chaulmoogra oil, 40; camphorated oil 40, camphor 2). – M. Leger (translated).


The rat, susceptible to the bacilli of Stefansky, seems not to be affected by that of Hansen. No attempt had been made to inoculate a human being with rat leprosy until the author tried it, in a man with both skin and nerve lesions. The inoculation was followed by an increase of the acid-fast bacilli in sputum. These did not have the appearance of degenerated forms, but presented an appearance worthy of special note. There were found: (1) small forms recalling the "pulveriform" type observed by Marchoux in a leper from the Antilles, with which he was able to infect rats; and (2) regularly arranged globi identical with those of the Hansen bacillus. The lesions could not be reisolated from the man to rats. In the third month the lesions took on a manifestly invasive character. Intensive treatment by chaulmoogra ointment interrupted this. – M. Leger (translated).


The author grouped in a village (to which he gave the name Hansen), about 4 kilometers from Nola, 40 patients with their nearest relatives, making a population of about 100 people. This was done by persuasion, without any coercion, by demonstrating the benefits of treatment and the better conditions of life in the new village than in those in which they were living. The inmates were furnished the rations necessary to subsist them until the development of their own farms, for which they were given the seeds which would permit them to meet their own needs. The success obtained shows the influence which the colonial physician can exercise if he knows the mentality of the natives and can gain their confidence. – [From abstract in Bull. Mens. Off. Internat. d’Hyg. publ. 26 (1934) 1180.]


Many acid-fast bacilli, either living or dead, can persist for many months and produce in the tissues a certain degree of granulomatous change which may be mistaken for rat leprosy. Only Stefansky’s bacillus produces a steadily progressive and finally fatal infection. The author failed to produce rat leprosy by injection of the cultures isolated by Uchida and by Cienfuegos and North. Failure also attended efforts to grow the organism by the methods recommended by Ota and Amari, Walker and Sweeney, Soule and McKinley, and McKinley.
and Verder, and also to detect a filtrable form of the organism as reported by Markianos. Sodium hydnoarinate, even in 5 per cent solution, has little or no bactericidal effect on the organism of rat leprosy. The pathology of experimentally induced rat leprosy is described and discussed fully and it is concluded that the disease is essentially an infection of the reticulo-endothelial system.

**[Author's Abstract.]

LOWE, J. A note on the action of chaulmoogra (Hydnocarpus) preparations on M. lepra eT Lep. in India 6 (1934) 79.

This paper discusses critically the work of Walker and Sweeney who, using cultures of acid-fast organisms including a supposed culture of Myco. lepra eT Lep. in India 6 (1934) 79, found that sodium hydnoarinate in dilutions up to 1 in 75,000 inhibited growth and made subculture impossible. The author treated emulsions of bacilli obtained from infected rats with solutions of sodium hydnoarinate of varying strengths for varying periods and injected the treated bacilli into rats. He found that even treatment by 8 per cent solutions for 20 hours did not kill all the bacilli, for injection of the treated bacilli into rats was followed by the development of generalized rat leprosy, though in some cases this development was somewhat retarded. It is concluded that sodium hydnoarinate has little or no direct bactericidal action in vitro on the bacillus of rat leprosy.

**[Author's Abstract.]


Myc. lepra eT In paraffin sections is less acid-fast and much less alcohol-fast than in smears. This is attributed to changes produced by fixation of the tissue. However, by suitable methods good staining can be obtained, but it is advisable to avoid entirely the use of alcoholic solutions in decolourizing, counterstaining and dehydrating. It is recommended that the staining be done in the cold with Kinyoun's carbol-fuchsin for half an hour, decolourizing in aqueous solution of acid, counterstaining with alcohol-free haematoxylin, and blotting with filter paper and drying quickly in air instead of dehydrating with alcohol.

**[Author's Abstract.]


The writer compares the clinical and histological findings made in a macule of neural leprosy with those made in a macule of "skin" leprosy. The neural type of macule is associated with a marked cellular reaction to a small number of bacilli, with the production of a characteristic granulomatous change in the skin and the nerves supplying it. In cutaneous leprosy the number of bacilli is far greater, the degree of cellular response is much less, and the granulomatous change is somewhat differently distributed and of a different character, there being no giant cells and no tendency to caseation. He correlates these differences with differences in the results of the intradermal leprolin test, and concludes that the factor which determines the type of lesion is the resistance of the patient as evidenced by the degree of cellular response to a given dose of inoculated bacilli. There is little or no evidence to support the
idea of a neurotropic strain of organism as causing nerve leprosy. The author stresses the importance of differentiating between neural cases, resistant, and cutaneous cases, non-resistant, in diagnosis, prognosis, prevention and treatment.

— J. LOWE.

SANTRA, I. A comparison of leprosy in the Philippines and in India. Lep. in India. 6 (1934) 179.

This article contains a long discussion of what was seen during the author's recent visit to the Philippines. He compares leprosy as he saw it there with the disease as he knows it in India and concludes that there is no appreciable difference in its manifestation in the two countries. He thinks that the differences that have been reported by various workers are only apparent and not real, and are due to the fact that observers have not studied the disease under conditions which allow any true comparison to be made. When studied under similar conditions in these two countries the clinical manifestations are found to be very similar.


This author claims to have succeeded in making tissue cultures from fragments of leprous nodules from two patients. Maximov believes that fibroblasts are fully developed cell elements, but Möllendorff considers that fibroblasts may develop into macrophages or granular lymphocytes. To test these theories Timo­feje­wsky excised nodules grown by section to be typical lepromata, and planted fragments of these, chiefly in heparinized plasma from both men and rabbits (usually a mixture of equal parts of each), and human-embryo extract. The cultures grew well for a time but after two or three weeks gradually died; the longest time tissues was kept alive was forty-five days. The following is, from a translation (by Dr. R. J. Gittins) of the author's conclusions.

The planted fragments grew well, giving chiefly (a) macrophages, sometimes in forms resembling fibroblasts (''fibroblast-like'' cells), and (b) fibroblasts. While macrophages and fibroblast-like cells showed large numbers of bacilli in their cytoplasms, the fibroblasts showed none. In the second week these occurred, both in the original fragments and in the zone of proliferation, a general change of fibroblast-like cells into macrophages under the influence of leprosy bacilli, which increased greatly in the cell cytoplasms at this time. The fibroblasts remained free from bacilli, retained their morphological characteristics, and did not change into wandering cells, in harmony with Maximov's teaching. The fibroblast-like cells were regarded as histiocytes or reticulo-endothelial elements. Vito­ Howell's lepra cells developed from ordinary macrophages. Both in the fragments and in the proliferation zone these cells were not permanent elements but underwent rapid degeneration. Sometimes in the proliferation zone microscopic leprous nodules developed, consisting of collections of epithelioid cells full of bacilli. Giant cells were often formed by coalescence of several epithelioid cells. The bacilli apparently had no definitely toxic effect on the cells, which increased in spite of the bacilli in them. The decline of tissue growth was attributed to the great increase of bacilli, in both the cells and the culture medium. This increase destroyed the cytoplasms of the cells and produced a deterioration in the medium. After the tissue cultures had died the
bacilli continued to increase slowly without forming colonies visible to the naked eye. Fresh cultures of normal human tissue and of leukocytes were infected with bacterial colonies from the old cultures. Growth occurred in the protoplasm of the cells and somewhat later in the medium. —J. Leve.


The intradermal tuberculin reaction was positive in 36 per cent of 156 lepromatous patients of all ages, while in 4,000 nonlepromatous public school children of the same racial and economic origins it was positive in 69 per cent. However, careful study of the lepromatous patients by clinical, x-ray and laboratory methods revealed only 19 per cent with findings presumptive of tuberculosis. Of the 37 patients between 10 and 39 years of age, 16 per cent showed such findings; of the non-lepromatous children only 2 per cent. Of 84 lepromatous patients given the tuberculin test annually, 18 showed complete changes from negative to positive or vice versa, and 32 others showed definite and marked variations in the strength of the reaction. The average annual mortality from tuberculosis for 3 years among an average population of 155 patients was 12 times that of the comparable normal population. Among 150 patients under observation for from several months to 4 years, 62 developed acute leprosous reactions. Fifteen of those 76 per cent showed a positive tuberculin reaction or other evidence of tuberculous infection; and the course of leprosy subsequent to reaction, in those 58 was considered to be prone to more active progression. In discussing the low frequency of skin reactions and the fluctuation in their intensity the probabilities of disturbances in lymphatic drainage, in circulation, and in innervation are considered, but none are believed adequate to explain all cases. The number of patients studied is too small to permit sweeping conclusions, but the findings are suggestive. —[AUTHOR'S ABSTRACT.]


Tests were made of 200 patients classified according to their lepromatous activity. There was very little difference in the total cholesterol in the groups that were improving, those who were stationary and the group whose physical condition showed retrogression. However, the percentage of cholesterol esters was increased in 14 of the 74 patients showing improvement, 25 of the 71 classified as stationary, and 38 of the 51 showing retrogression. The van den Bergh reaction was positive in 138. The qualitative analysis showed possibility of early hepatic lesions, while the quantitative analysis indicated latent jaundice. Complement fixation (kind of antigen or purpose of test not mentioned) was positive in 83 patients. —J. G. WOOLLEY.


This is an expansion, containing details of interest to the local profession not familiar with leprosy, of an article which appeared in the last issue of this Journal [7 (1934) 71]. —H. W.W.
Current Literature


This paper, read at Dar es Salaam, is a round of the views of the etiology (rather than diagnosis) and treatment of leprosy, strictly according to familiar British practice. —H. W. W.


This is a clinical and histopathological study of 69 children, varying in age from two and a half to twenty years, whose parents were both leprosy except one whose father only was affected; 32 were considered nonleprosy while 8 were clinically suspicious when admitted to the welfare institution. The constant and common presence of depigmented macules, whether hazy or clearly defined, histologically showing perivasculcar round-cell infiltration or tuberculoid changes, confirms the findings of other observers as regards the depigmented macule except that in these cases multiple macules appeared simultaneously. Also, minute pinkish papulo-vascular eruptions simulating "goose flesh" were found in 40 per cent of the cases, and these were considered to be leprous histologically. The author believes this condition corresponds to lepra reaction among confirmed lepers, though localized and in a milder form. No leprosy bacilli were found, except suspicious acid-fast granules in one case. The theory of a non-acid-fast or "virus" stage in the life cycle of the bacillus is believed to be supported by the results of this study.

J. O. NOLASCO.


——. Intérêt de l'observation histologique dans le diagnostic des lesions maculo-anesthésiques de la lèpre. Rev. col. Méd. et Chr. (1934) No. 61, July 33.

Because of the difficulties of diagnosis of these cases, often seen in endemic countries, which present only pale patches with some less sensory disturbance but which usually are negative for bacilli, the authors have examined biopsy specimens from nearly a hundred Negro and mixed blood patients in Guadeloupe, and here summarize the findings in 39 cases in which the diagnosis was unmistakable. The epidermis is usually thinned and more or less flattened, an important feature, and the pigment is decreased. In the corium are varying numbers of circumscribed cellular foci, the elementary lesions of the macules; these are round, oval or linear, showing a predilection for the sweat glands though often related to hair follicles; the nerve branches are generally not involved. They are composed chiefly of epithelioid cells, contain numerous capillaries, and show an annular or inflammatory reaction, though there are generally some lymphocytes, rare plasma cells, and some fibroblasts; sometimes there are large giant cells with nuclei disseminated or grouped, sometimes peripheral as in the Langhans cell. Bacilli were found in less than a fourth
International Journal of Leprosy

of the cases studied, in only 18 of the 30 of this report; when present they varied from very rare to extremely numerous. On the whole the findings are similar to those of Darier reported at the Berlin Conference in 1897. It is concluded that the histopathology is insufficiently specific to serve as confirmation of a clinical diagnosis.

[This description should be read in conjunction with the authors' own summary in the following abstract.—Excerpts.]

Des Essarts, J. Q. and Lefrù, G. Note sur le diagnostic différentiel entre les nodule rétinocaves lepraux et tuberculeux dan les lesions cutanées.

[Differential diagnosis of elementary leprosy and tuberculous lesions in the skin.] Bull. Soc. Path. exot. 27 (1934) 796.

The authors deal with the differential diagnosis of cutaneous tuberculosis in comparison with the changes which they found in leprous macules, which they now summarize essentially as follows:

In the neuroleprides they found, in nearly all cases, focal lesions consisting essentially of perivascular infiltrations of "conjunctive" and lymphoid cells, with rare Yielow cells, among which are sometimes multinuclear giant cells. These formations contain, in less numbers, the same cytological elements as the leproma, differing only in their more elementary structure, their reduced volume, their elective localization around blood vessels and the rarity of bacilli. Usually the special aspect of these lesions, together with clinical findings and history, may confirm the diagnosis of leprosy where it is endemic.

In the depigmented patches of nerve leprosy these lesions sometimes affect a follicular organization with giant cells of the Langhans type surrounded by epithelioid cells and some lymphocytes. This arrangement, which recalls that of the tuberculous follicle, has been reported by various authors, who have named it the "tuberculoid of leprosy." Out of 20 biopsies of nerve-leprides this tuberculoid follicular arrangement was found 12 times; in 3 cases bacilli were found.

The differentiating features between these lesions and the elementary foci of cutaneous tuberculosis are given in parallel columns, too detailed to be reproduced. Distinctions are found in their staining and shape; in their relation to the surrounding stroma, epidermis, hypoderm, and accessory structures; in the arrangement of the cells, features of the epithelioid and giant cells, frequency of lymphocytes, vascularization and caseation; and in the bacteriology, including animal inoculation. Certain difficulties of diagnosis are discussed, and it is pointed out that changes similar to those of the neurolepride may be found in certain parasitic and other conditions.

—H. W. W. Lefrù, G. and Bonnet, P. L'equilibre protéique du sérum sanguin de lepraux.

[Serum protein equilibrium in leprosy.] Bull. Soc. Path. exot. 27 (1934) 861 and 491.

Total albumin was estimated by the method of Kayser, serial by that of Howe. In cases of both cutaneous and neural leprosy, untreated and free from
Current Literature

complicating disease, the protein equilibrium is found to be modified from the time of appearance of symptoms. The globulins are increased, the total albumins is sometimes normal and sometimes increased, the sera normal or diminished. The seric-globulin quotient is reversed. It is concluded that in syphilis subjects with a normal Vernes index, hypoglobulinemia, and reversal of the albumin quotient, the diagnosis is leprosy. With the Vernes index abnormal and the other factors as stated there is a presumption of leprosy. With the Vernes index abnormal or normal but the globulin normal and the albumin quotient not reversed leprosy is absent. —ET. BURNET.


The authors' attempt to explain the mechanism of the resorcin reaction on the ground of increase in quantity of euglobulin has pertained only to tuberculosis, leishmaniasis and malaria; they have not investigated leprosy. —ET. BURNET.


The Vernes reaction does not demonstrate protein disequilibrium. To demonstrate that it is necessary to employ the classical methods of analytical chemistry. —ET. BURNET.

Montestruex, E. L'épreuve à sero-floculation de Vernes à la résorcine. [Vernes flocculation reaction in leprosy.] Bull. Soc. Path. exot. 27 (1934) 712.

This reaction is due to a decrease of the seric and unequal increase of euglobulins and pseudo-globulins, the latter being less increased than the former. In leprosy it occurs only in the nodular form of the disease. It is suggested that an increase of the optical index in a case of leprosy may perhaps indicate a tendency to develop that form, and if so that this test should be useful in studying the evolution of the disease. —ET. BURNET.


The author tested 18 sera of lepers (one syphilitic), with 30 syphilitic sera for comparison, using formalin undiluted (40 per cent) and diluted in water and saline. With pure formalin the leprous sera coagulated firmly, as did the syphilitic sera, but somewhat more rapidly; with the 1:20 solution in 7 per cent saline there was at most only thickening of the sera, but this occurred in the leprous sera considerably more rapidly than in the syphilitic; with water-diluted formalin there was no notable difference. The author concludes that in the country where he works (Kalawar and yaws evidently absent) formalin coagulation in a Wassermann-negative serum is presumptive of leprosy. —ET. BURNET.
Cholesterolemia with its different elements, free and esterified cholesterol, is too greatly influenced by factors which are not understood to permit drawing any conclusions about its variations. The study of this question in leprosy has not as yet given any practical results.

---


The Vaudremer vaccine consists of iodine-sterilized cultures of the forms obtained by Vaudremer by sowing leprosy bacilli in the fluid of a culture of Aspergillus fumigatus. To two previous observations (one by Tournier and Salente) the authors add three new ones. In the course of febrile periods the vaccine seems to affect certain manifestations which are perhaps of allergic nature, namely, edema, pain, iritis. It did not stop the evolution of the disease. "Medicaments of the most diverse kinds may affect certain manifestations of leprosy."

---

MONTÉL, L. ET AL. "Traitement de la lépre par le bleu de méthyle dans les injections intraveineuses. [Treatment by methylene blue intravenously."

---


The treatment consists of intravenous injections of a strictly neutral 1 per cent solution of methylene blue, sterilized by heating for an hour at 80°C for three days. The injections are made slowly, the dose at first being 5 cc, increasing to 50 or 60 cc; the average effective dose is 20 cc. It is recommended that injections be made 2 times a week for 5 weeks, or if there is intolerance 2 times a week for 10 to 12 weeks, with a 3-week rest period after each such course. This treatment can be continued for months and probably for years. There seems to be an advantage in combining it and treatment with chaulmoogra derivatives.

It is necessary, if one desires to use this method, to read these reports in full, at least the comprehensive one last referred to above; one should understand the precautions to be taken, the difficulties met, and the results to be expected. Two tables summarize one hundred cases treated. In general the treatment is without danger. The author seems to be an enthusiastic optimist but he re
Current Literature


The author, who agrees with the current "liberal" views on prophylaxis, distinguishes four phases in the evolution of leprosy that require variations in treatment. He would reserve intravenous injections for the third phase, that of generalization of lesions. His preference (which will not be shared by all) are the chaulmoogra, a proprietary chaulmoogra preparation, and methylene blue by the intravenous route, which he himself has introduced for leprosy treatment. He only mentions other methods, rejects the use of potassium iodide, and gives much importance to general treatment. (It is remarked that alepold should not be classed with the esters of chaulmoogra oil and that antimony potassium tartrate is not employed as a remedy for leprosy itself but for lepra reaction—lepra fever.) Intradermal injections are dealt with in a very summary manner. Finally, the subject of preventive treatment of infants is discussed; he recalls the experience of Rodriguez, according to which chaulmoogra treatment has no preventive effect.

AFANDO RO, A. Traitement de la leprose par les injections intraveineuses de bleu de methylene. [Treatment by methylene blue.] Bull Soc. Path. exot. 27 (1934) 805.

The smallest infiltrated lesions of the skin are marked by coloration, but not the simple atrophic and anesthetic areas. In general the small miliary lepromas which are effaced during the course of the treatment reappear when the injections are suspended, though the patient remains colored. One patient after having received 200 cc. of the drug had a febrile lepra reaction; she had been given a preparation sterilized by autoclaving. (Montrel recommends fractional sterilization.)


Leprosy has been progressively increasing in Argentina. Whereas in 1906 only 724 cases were known, the last report by the National Department, in 1933, gave 2,970 cases, and many others have certainly not come under observation. The author ventures the opinion that there may be from six to eight thousand in the country. The author is convinced that the disease is directly...
Internation Journal of Leprosy

1935

or indirectly transmissible from one person to another. Half of the number of cases will show excretion of leprosy bacilli (open lesions) while the other half will not show bacilli (closed lesions). The latter need not necessarily be quarantined, but may be treated in public dispensaries though always under strict control.—[From abstract in Urol. and Cutan. Rev. 38 (1934) 824.]

Montanes, P. La intradermorreacción con el bacilo de Hansen. [Intradermal reaction with the leprosy bacillus.] Arch. Med. Cir. y Exep. 37 (1934) 399-416.

Montanes says that it is possible to obtain pure sediments of Mycobacterium leprae by homogenization of lepromas triturated and treated with 10 per cent Koch's solution. By means of the intradermal reaction with emulsions of leprosy bacilli the author obtained 100 per cent of positive results in cured lepers and in patients with various diseases but without leprosy. In a group of 116 lepers the intradermal reaction, performed with the same emulsion, gave 84 per cent of positive results. The older the leprosy the greater the number of positive results. The percentage of positive results among lepers is greater in cases of the pure form of nervous leprosy, and also in cases of mixed forms in which the degree of nervous invasion is intense, than in other forms of leprosy. The intradermal test was followed by positive results in 80 per cent of the cases in which the disease was inactive and the presence of bacilli in the nasal mucous could not be demonstrated. The author considers the positivity of the intradermal reaction of great value, especially in the case of patients who are going to be discharged as cured.—[From abstract in Jour. American Med. Ass. 103 (1934) 77.]

Costa0n, A. Considerazioni sulla terapia della lepra. Ricerche su il sangue e sulla istologia del leproma prima e dopo il trattamento. [On the therapy of leprosy, blood findings, and histology of the leproma before and during treatment.] Osp. maggiore 22 (1934) 99-109.

This article reports the results of treatment at the dermatological clinic at Milan. Blood findings in five cases of leprosy showed a diminution of red cells and hemoglobin, some anisocytoses, poikilocytosis and immature cells. During the intermittent periods of improvement there was a corresponding improvement in the blood picture. Searching for the bacilli in venous blood taken with anticoagulant they were found only once, this during a febrile exacerbation. In the peripheral capillary blood, however, they are more abundant and more easily demonstrated. Blood cultures on Löwenstein's medium proved negative. Positive reactions with the Wassermann and other serum tests used were not vitiated by chaulmoogra treatment, and were dependable. Biopsies of lesions taken before and during treatment showed that treatment caused almost complete disappearance of the infiltration, and the bacilli underwent granular degeneration.—[From abstract in Urol. and Cutan. Rev. 38 (1934) 511.]


Experiments in vitro show that sodium thiosulphate has the property of changing the leprosy bacillus from Gram-positive to Gram-negative. It has
also the effect of causing the bacilli to take on a chain-form arrangement. On these grounds the authors propose the therapeutic use of this chemical compound in leprosy. - [From abstract in British Jour. Derm. and Syph. 46 (1934) 331.]


Duval and Holt record failure to confirm the recent claims of Wherry, and of Soule and McKinley, that an environment of CO2 and O2 gases enhances the growth of Myco. lepræ. They could obtain no evidence of any influence of these gases on the growth of the bacilli. - [From abstract in Trop. Dis. Bull. 31 (1934) 552.]


Holt records that she could obtain no clear evidence of any multiplication of the leprosy bacilli in chick embryo tissue cultures, as claimed by McKinley and Veeder, and points out the difficulties in estimating whether any actual multiplication of the organisms has taken place, as a result of concentration of them with the autolysing of the leprous tissue present, and other fallacies. She even found evidence of degeneration and loss of viability after four months in such culture media, and concludes that in her experience chick-embryo tissue emulsified in Tyrode’s solution is valueless as a nutritive for the cultivation of the bacillus. - [From abstract in Trop. Dis. Bull. 31 (1934) 552.]


Illustrations are given of the microscopical resemblances between the globi of leprosy nodules and the rod-shaped pigment within the epithelial cells of the retina of embryo chicks. They can be distinguished by Ziehl-Neelsen staining. - [From abstract in Trop. Dis. Bull. 31 (1934) 552.]


The authors report that on cultivating acid-fast organisms isolated from human and rat leprosy lesions in fresh tissue cultures and in minced embryo medium, both acid-fast and nonacid-fast organisms are found during the first two days, but the acid-fast then diminish and nearly disappear by the tenth day. On transferring growths to fresh similar media the same thing is repeated, but this does not occur with numerous other nonacid-fast bacteria on the same media. As both human and rat leprosy behave in the same way they think these infections are caused by the same bacillus. - [From abstract in Trop. Dis. Bull. 31 (1934) 552.]

The authors record the use of minced organs of rabbits, guinea-pigs and rats in Tyrode solution as culture media for leprosy bacilli. They obtained good growths in the two former but not in the rat tissues; in them the organisms lost their acid-fastness in about five days. They therefore conclude that living embryonic tissues are not necessary for obtaining cultures.—[From abstract in Trop. Dis. Bull. 31 (1934) 553.]

REVIEWS

LEPROSY SURVEY OF CEYLON, 1933. (By H. G. Cochran and D. S. de Simon.)


The need of a leprosy survey as the first essential step in tackling the problem in Ceylon was pointed out by the Director of Medical and Sanitary Services in his report for 1930, and as a result two medical officers were sent to India for training. In October, 1932, they made a preliminary survey of known cases, and in March, 1933, started a survey of the Eastern Province. On invitation of the government Dr. Cochran joined the survey officers in May, 1933. The report under review consists of: (1) Cochran’s findings and suggestions, and (2) Dr. de Simon’s reports on (a) the known cases of leprosy in Ceylon, and (b) the survey of the Eastern Province.

Cochran’s report comments on the inadequacy of the present antileprosy system, with rigid segregation, havoc of home-isolation, and control of discharged patients. Emphasis is laid on the importance of arresting the disease in an early stage. He recommends (1) creation of a leprosy board, (2) organization of treatment and prevention centers, (3) a voluntary segregation system similar to the British mental institutions, (4) postgraduate courses, and (5) special training of medical officers. These findings were based on the observations made in the rural areas of the Eastern Province and the urban area of Colombo Municipality, but the recommendations, Cochran states, will probably apply equally to any area in Ceylon. His report concludes with a suggested plan of work for the leprosy survey officers.

Knowledge of the early history of leprosy in Ceylon is scanty. The Lepers’ Ordinance of 1901 was responsible for the present practice of segregation in the two asylums at Hendala and Mantivu, which institutions afford the records of known cases in Ceylon. Out of a population of over five millions there had been, to the end of 1932, a total of 2,235 cases, of whom 1,489 were then recorded as still alive while 746 had died. Of those alive, 1,272 were males and 277 females, a proportion of 4.3 to 1. The principal endemic areas were the Western, Southern and Eastern Provinces. No race was found to be exempt, but the highest incidence was amongst the descendants of the Portuguese and the Dutch. The oldest case was 85 years of age and the youngest 4 years; in 61 per cent of cases signs of disease were shown before the thirtieth year.

The main feature of the survey in the Eastern Province was the manner in which the problem was tackled with the cooperation of all officers of the medical department, the chief headmen of the districts and the minor headmen.