ABSTRACTS

Tratamiento de las Leprorreacciones con Cortisona, by **Drs. Contreras, Guillen, Miguel, Terencio** and **Tarabini.** Fontilles, 1955, V. 3, No. 8. Treatment of Lepra Reactions with Cortisone.

The authors first review the results obtained by previous workers, many of whom found that there was only temporary relief of reaction, with a return of the condition when cortisone was stopped. Their own trial was in ten patients, all with the lepromatous form. In nine of these the lepra reaction was general, one of them having suffered for a year with reaction which would not yield to any form of treatment. In the remaining patients the reaction was in the form of *erythema nodoso*. The preparation of cortisone used was Altesona, made up in 20 c.c. flasks with 25 mgm. per c.c. for parenteral injection. The history and course of treatment, along with temperature charts, are given for each case. Fever disappeared in from 24 hours to 3 days. The signs of inflammation in the skin and mucosa disappeared more slowly. Neuritis and pain in the bones disappeared yet more slowly. From the very beginning of treatment there was a feeling of physical and mental well-being. In two cases there was a relapse which disappeared on further treatment. The authors consider that the more permanent results they obtained as compared with other workers, were due to the use of smaller doses, 1.5 gm. being the maximum total amount used, as compared with 4 to 8 gm. Tolerance was perfect except for one case in which there was generalised oedema with albuminuria. This patient had had lepra reaction for a whole year. The usual daily dose of cortisone was 100 mgm. given in two injection of 50 mgm. each, continuing for eight days. The same treatment was resumed for a few days if there was any return of symptoms.

The authors continue to treat the majority of lepra reactions with haemotherapy, reserving cortisone treatment for those who do not yield to haemotherapy.

***Trop. Dis. Bulletin, Vol. 52, No. 7, July, 1955**

Ocular Leprosy. Proc. Roy. Soc. Med., 1955, Feb., V. 48, No. 2, 112-117 (Sect. Ophthalm. 6-11), 3 figs. By **E. W. O'G. Kirwan.**

The author draws upon his unrivalled experience of ocular leprosy to provide probably the best description of the clinical manifestations as they affect the eyes which the reviewer has so far had the good fortune to read.

He gives in considerable detail the manner in which the various parts of the eye may be affected. There are several excellent illustrations. He stresses that early diagnosis and early

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treatment of eye lesions are of great importance, but adds that in his experience the benefit to the eyes from sulphone therapy is considerable. The lepra reaction is also indicated as a dangerous ocular complication and he discusses the use of cortisone in its control.

With regard to lesions of the posterior segment, the author's touch is perhaps a little less sure. He states, " lesions of the posterior segment . . . do occasionally occur. . . . The wonder is that they are not more frequently observed." The next paragraph, however, contains the statement that " as lesions of the posterior segment of the eye do not occur or at all events occur rarely . . ." The reader is thus left in some doubt as to the author's real beliefs with regard to this controversial point.

Apart from this minor detail, this paper is one of the most balanced and best written accounts of ocular leprosy to appear in recent years and should be read by all those with an interest in the subject.

Cortisone in the Treatment of Leprous Reactions. Bull. Soc. Path. Exot., 1954, V. 47, No. 6, 848-56, 9 charts. By **E. Montestruc.**

The author treated five patients in whom severe reactions interfered with sulphone or thiosemicarbazone treatment. He began with 200 or 300 mgm. (half by mouth and half by injection) twice on the first day, 150 mgm. on the second day, then 100, 75 and 50 mgm. on the following days. Generally the reaction ceases, but if necessary the amount is increased again to 75 or 100 mgm. He finds that with this it is possible to return to sulphone treatment patients who would otherwise be unable to coninue it.

***Trop. Dis. Bulletin, Vol. 52, No. 8, Aug. 1955**

Specific Tissue Alteration in Leprous Skin, VIII. Inoculation of, " Leishmania tropica " into Leprous Patients. Arch. Dermat., 1955, Apr., V. 71, No. 4, 441-50, 7 figs. By **E. Liban, A. Zuckerman and F. Sagher.**

This paper is in continuation of a series (see this *Bulletin*, 1955, V. 52, 273, 274 *bis*) in which the effects of inoculation of lepromatous patients with BCG and *Leishmania tropica* are studied. Out of the 23 lepromatous patients tested 15 had active lesions with bacilli demonstrated, and 8 failed to show bacilli. All but 3 had negative responses to the leishmanin test. All 23 patients

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were injected intradermally in the deltoid region with a standard dose of a million washed culture lepromonads. All the patients responded clinically to the inoculation in the same way as normal persons, a papule developing after a period of two weeks and increasing from 1 to 4 cm. in diameter, ulcerating within 6 to 7 months and scarring by the 7th to 12th month. In 44 biopsies of inoculation lesions, 20 of the 23 patients showed histological lesions identical with specimens from lepromatous leprosy, including foam cells with sudanophilic vacuoles. In four specimens there were a few giant cells of the Langhans type scattered among the foam cells. In seven specimens the foam cells contained Leishman-Donovan bodies often in large numbers. In five specimens the general picture was that of tuberculoid granulation tissue as seen in relapsing cutaneous leishmaniasis. The isopathic response is similar to that observed in leprous patients following inoculation of living BCG bacilli.

Tuberculin and Lepromin Sensitivity in the South African Bantu. A Pilot Survey. Lancet, 1955, May 14, 996-1001, 3 figs. (17 refs.). **S. W. A. Kuper.**

An investigation was made in three groups of South African Bantus to see if there was any co-ordination between the tuberculin and the lepromin reactions. The three groups consisted of 102 patients with leprosy, 57 patients with pulmonary tuberculosis, and 114 healthy controls. Lepromin was injected into the left arm and tuberculin into the right. The results are shown in graphs. The degree of correlation established between tuberculin and lepromin sensitivities was small, and was found only among the patients with pulmonary tuberculosis, the smallest of the three groups tested. The tuberculous patients showed a greater degree and sensitivity to lepromin than did the controls, though this might only be a consequence of the former correlation. In lepromatous leprosy a small proportion of patients showed an intense degree of sensitivity to tuberculin; but when these were excluded the two main groups of leprosy patients did not show greater tuberculin sensitivity than the controls.

The conclusion is arrived at that there is no simple and direct relationship between tuberculin and lepromin sensitivities, but that observations in patients with tuberculosis and lepromatous leprosy suggest the existence of a relationship of some kind.

Sheet Grafts in Leprosy. Rev. "Fontilles," Valencia, 1955, Jan., V. 3, No. 7, 528-31, 8 figs. on 2 pls. By **D. J. Terencio.**

Owing to the use of sulphones the number of patients at

Fontilles with lepromatous ulcers of the legs has been reduced from 62.6 per cent in 1943 to 14.04 per cent in 1954. However, there are some ulcers of the lower parts of the legs which have continued for a long time and refuse to yield to ordinary treatment. The author has found that these may be successfully treated with sheet grafts, either of the thin (0.2 to 0.25 mm.) Thiersch variety, or of the thicker (0.3 to 0.4 mm.) Blair Brown variety.

For 15 days beforehand all treatment is stopped, the ulcer is washed with normal saline and exposed to the sun daily. Vitamin and other general treatment is given. Anasthesia is produced locally with 1 per cent Novocaine-adrenaline solution, and an ampoule of Escofedal (not described) is given intravenously. The ulcer is scraped thoroughly and all thick fibrous tissue removed, leaving only a vascular base. The raw surface is covered with a compress of normal saline while the graft is removed with a razor from a healthy part of the thigh. The graft is stitched into position with fine silk and covered with sterile vaseline gauze for 10 to 15 days. Penicillin, 400,000 units, is given daily for 4 to 5 days. The results obtained were much superior to those obtained with small skin snip grafts.

Effect of vaccination with BCG on the Evolution of Murine Leprosy: Observation in Rats Inoculated Intraperitoneally with a small dose of "Myco. leprae murium." Rev. Brasileira Leprologia, S. Paulo, 1954, June, V. 22, No. 2, 124-34, 10 figs. and 1 chart (12 refs.). English summary. By **W. A. Hadler** and **L. M. Ziti.**

In this experiment 50 rats were divided into four groups; 13 were given 25 mgm. of BCG orally; 12 were given 5 mgm. similarly; 12 were vaccinated with 5 mgm. of BCG intramuscularly; and 13 were left as controls. All animals were inoculated with 0.03 mgm. *Myco. leprae murium* after 90 days, and were observed for 450 days. Between those vaccinated with BCG and the controls there was no difference in the evolution of the disease. While rats vaccinated with BCG do not show in their macrophages the power to destroy mycobacteria like those of leprosy, rat leprosy and tuberculosis, the macrophages of guinea-pigs vaccinated with BCG do acquire this power.

A Comparative Study of Lesions Provoked by the Intradermal Injections of Suspensions of "Myco. leprae" and "Myco. tuberculosis" in Guinea-pigs previously Vaccinated with BCG. Rev. Brasileria Leprologia, S. Paulo, 1954, June, V. 22, No. 2,

109-23, 10 figs. and 1 graph. English summary. By **W. A. Hadler.**

Ninety-eight guinea pigs were inoculated with BCG intramuscularly and intraperitoneally. Of these, 58 were injected 40 days later intracutaneously with 0.05 ml. of BCG suspension, and another 22 with 0.1 ml. of lepromin, while the remaining 20 were injected on the one side with BCG and on the other with lepromin. (There is a discrepancy of 2 in the numbers.)

It was found that in normal guinea-pigs the cellular reaction was different in the sites of BCG and lepromin injection, only the BCG producing an abscess. But in guinea-pigs previously inoculated with BCG the cytological and histological appearances were similar in nature. It was found, however, that after observation for 50 days the reaction with BCG was stronger than that with lepromin, but disappeared more rapidly. It is concluded that *Myco. tuberculosis* is more easily lysed than *Myco. leprae*, and that this probably depends on their different structures, chemical compositions and physico-chemical properties. Possibly the lipids account for these differences, at least in part.

***Trop. Dis. Bulletin, Vol. 52, No. 9, Sept. 1955**

The Incidence and Epidemiology of Leprosy in Uganda. Trans. Roy. Soc. Trop. Med. & Hyg., 1955, May, V. 49, No. 3, 241-52, 1 chart. By **J. A. K. Brown.**

Uganda, with a population of about 5 million and an area of 93,981 square miles, of which a seventh is open water, is divided into Eastern, Western and Northern Provinces, with the kingdom of Buganda in the centre. These are sub-divided into districts, counties, sub-counties and rural parishes.

As there are no towns or villages, surveys were made at the parish or sub-county level. Help in enumeration and in gathering the people together for examination was given by the chiefs and the local medical and other officials. Sometimes numbers of local populations could be obtained from previous sleeping sickness registers. In tabular form the results of 36 sample surveys are given, divided under the four divisions of the country. The subjects with leprosy are divided according to age, sex and type of disease.

Because of its varying climatic conditions, Uganda is considered a particularly suitable country for studying the effect of climate on the incidence of leprosy. The surveys showed that " atmospheric humidity, temperature and nearness of water did

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not appear to have any relationship to incidence," and there was no correlation between incidence and population density. The proportions between sexes was almost equal. Among 882 subjects, 19 per cent were under 15, 32 per cent between 15 and 30, and 31 per cent between 30 and 45. The surveys showed a series of incidence values from 0.0 to 4.1 per cent.

It is concluded that " the social structure determines the age of onset, the age frequency and the disease pattern. Clinical leprosy develops in susceptible persons after contact with a patient. Susceptibility is inherited and may be transmitted through successive generations without the appearance of clinical leprosy. Variations in incidence are due to those factors which influence the number of susceptibles and their opportunities for contact."

The suggestion that leprosy may be spread by tuberculoid cases is argued as follows: " The infecting patient is usually thought to be the lepromatous case. Where the lepromatous rate is 20 per cent it may be difficult to find a village without at least one. The inference. then may appear legitimate. With a lepromatous rate of 10 per cent, the same incidence and similar living conditions, difficulties arise. A lower lepromatous rate implies a higher general level of resistance. It is not easy to understand why the greater the resistance the greater should be the potentialities of fewer lepromatous cases. The more intimate communal life may be sufficient explanation in a compound or a village but not under the different conditions of East Africa. There are parishes of 1,000 people dispersed over 20 square miles without a single lepromatous case, and tuberculoid cases occur five miles or more from the nearest lepromatous patient. It would require the greatest mobility and popularity on the part of the lepromatous subject if all the leprosy in the country could be attributed to them. Open cases could act as the only source of infection in Uganda on the assumption of carriers, an assumption less easy than that tuberculoid cases are infectious. Admitted that lepromatous cases more easily infect and that intimate contact increases the risk, for susceptible people contact with a tuberculoid patient may be sufficient to decide the issue."

[This would imply that tuberculoid cases could infect considerable numbers of those with fairly high resistance as shown by their tuberculoid type, a very serious implication. This matter is one of importance and requires careful study (see Editorial). The paper is of much interest, and deserves to be studied in the original.]