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The original articles are as follows:

K. P. C. A. Gramberg writes on *Nerve Decapulation in Leprosy.* He recommends the total stripping of the fibrotic epineural sheath in thickened painful nerves. He describes the technique, and states that there is practically no danger of complications. Pain and parethesia disappear in nearly all cases. He performed the operation 169 times, of which 108 were on the ulnar nerve. As regards pain and paresthesia the results even after 12 years are good, but as regards paralysis not so good.

Yukichi Satani *et al.* claim good results by injecting Acidomycin intradermally. This substance is obtained from *Streptomyces acidomyceticus.* Subcutaneous injection has no effect either on tuberculosis or leprosy, but intradermal infiltration of leprous lesions causes fading or disappearance of the infiltrated lesions and improvement of sensation. In some the bacilli become fewer or disappear. In some, lesions at a distance also improved.

R. S. Guinto, J. A. Doull and E. B. Mabalay write *A Note on the Lepromin Reaction in Males and Females.* As reactivity to lepromin is generally interpreted as an indication of resistance to lepromatous leprosy, and lepromatous leprosy is much commoner

in males than in females, a comparison of the results of the lepromin test was made in 776 males and 1,075 females. The early positive reactions in males and females were respectively 3.9 and 6.1. The late positive reactions in males and females below 5 years of age were 17.7 and 14.1, and for those of 20 and over 94.6 and 97.0 respectively. Thus as far as the lepromin test is concerned there is no evidence of higher resistance in females than in males.

The same authors also write on *The Mitsuda Reaction in Persons with and without Household Exposure to Leprosy*. Three groups of persons were examined: (1) those exposed to lepromatous leprosy in the household, (2) those exposed to non-lepromatous leprosy in the household, and (3) those not known to have any household exposure to leprosy. They were all residents of the same town. The reactors in the three groups were respectively 73.4, 68.3 and 68.2 per cent. It is concluded therefore that household exposure does not have any effect on reactivity to lepromin.

J. H. Hale *et al.* describe *The Relationship and Significance of the Mantoux and Lepromin Reaction in Leprosy*. Leprosy patients were found to have a much lower Mantoux rate than the normal population, this being especially so in children, though the adult rate in Singapore approached that of the normal population. Children with leprosy responded to BCG vaccination and gave a Mantoux conversion rate very little lower than that found in normal children. It is considered that leprosy infects a selected population consisting of Mantoux negatives, tuberculosis infection thus giving some protection against leprosy, although there is evidence that tuberculosis is readily superimposed on existing leprosy. The essential feature is conversion to a Mantoux positive state and not the positive lepromin response that may result from BCG vaccination, which response is nonspecific.

E. W. Gault, A. P. Jayaraj and H. H. Gass describe *The Application of Histochemical Methods in the Study of the Skin in Leprosy*. By these methods capillaries and nerves have been found to contain sufficient alkaline and acid phosphatase, respectively, for these structures to be outlined in the skin. Carbol-fuchsin staining combined with these methods has shown the presence of bacilli in the capillaries and in the axons. In the capillaries the bacilli are probably in the endothelial cells. " If they were in the lumen it does not seem very likely that they would have remained massed as we found them." As regards the nerves, acid phosphatase activity in nerves provides an excellent method of showing axons and neurilemmal cells in the tissues. The myelin sheath remains relatively unaffected. " Our findings confirm the presence

of bacilli in swollen and apparently degenerate axons, but we are not able from our material to prove that the bacilli had actually travelled along the axon." This article is well illustrated with 10 photomicrographs.

The title of the next article is *C-Reactive Protein in Serum of Patients with Leprosy.* A. S. Rabson found this abnormal protein (CPR) in 79 per cent of 47 cases of active lepromatous leprosy, in 30 per cent of 41 arrested lepromatous cases, and in 58 per cent of 12 tuberculoid cases. The significance of these findings is doubtful, but further studies are planned.

J. Convit *et al.* write on *The Mantoux and Mitsuda Reactions in Hamsters and Guinea-Pigs before and after Vaccination with BCG.* None of 120 hamsters vaccinated orally, intradermally or intracardially showed a change of these two reactions from negative to positive, and it is concluded that this species (*Cricatus auratus*) is not immunalergically responsive to either PPD tuberculin or to lepromin. Forty-five guinea-pigs were divided into five groups and given BCG orally, intradermally, intracardially, and by a combination of these three routes, the fifth group being a control. Of the nine control animals in the unvaccinated group seven became Mitsuda positive; the two that remained negative became positive later as they approached adult age. All the vaccinated animals became Fernandez and Mitsuda positive. As regards the Mantoux reaction, only those animals that were vaccinated intradermally became positive.

Y. T. Chang writes on *Chemotherapy of Murine Leprosy. The Effects of Amithizone (TB1/698), p-Aminosalicylic Acid (PAS), B283 (a Phenazine Pigment), Five Antibiotics and Three Dipenylthiourea Compounds on Mouse Leprosy.* These substances were administered to mice which had been infected intraperitoneally with rat leprosy, and the effects observed as to retardation of the progress of disease in the pelvic fatty pads and omenta. Amithiozone appeared to cause some stimulation of the infection; the other substances, including the antibiotics: aureomycin, terramycin, penicillin, erythromycin showed no significant activity.

In an editorial on *Properdin and Natural Immunity,* this substance is described. It is an euglobulin with a molecular weight at least eight times that of gamma globulin, is not an antibody, but under certain conditions participates in such varied activities as the destruction of bacteria, the neutralisation of viruses, and the lysis of red cells. The different concentration in the sera of different animals have a highly suggestive parallel with the natural resistance of those animals to infection. " The rat, notoriously resis-

tant, has the highest titer, 25 to 50 units per cc., while the guinea-pig, a susceptible animal, has only 1-2 units. Normal man is in the intermediate zone, with 4-8 units, at the same level as the rabbit but below the hog and cow and above the sheep." It is suggested that leprosy should be explored along this line. " Does the resistant tuberculoid case differ materially from normal in its properdin titer? On the other hand does it differ significantly from the non-resistant lepromatous case? How about cases in various kinds of reactions as compared with non-reaction cases of the same types of leprosy? "