

## BRIEF REPORTS

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### ON THE TREATMENT OF LEPROTIC ULCERS

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The treatment of spreading ulcerations in leprosy presents peculiar difficulties. Apart from the indolent trophic sore and the ulcerated nodule, the cases causing most anxiety are (a) reaction cases with multiple subcutaneous foci of leprotic pus, and (b) toxemic cases with extensive involvement of bone and deep pockets of thin, grayish pus that often spreads upward along the fascial sheaths. In the latter case it is of course essential to remove the necrotic bone. In both cases the pus may contain acid-fast bacilli. Treatment is usually unsatisfactory unless amputation is resorted to. Consequently the observations here recorded on the use of an antiseptic that has proved exceptionally effective are of practical interest.

The antiseptic referred to is an English proprietary preparation called "dettol," claimed (a) to have a Rideal-Walker coefficient of 3.0, (b) to be much less toxic than lysol, and (c) to be noninjurious in its pure state to normal, unbroken skin. The manufacturers state that a few drops of undiluted dettol rubbed over the hands will keep the skin sterile for a number of hours. This last claim, if correct, is of obvious importance in leprosy work where there is constant commerce of infected papers and other materials between the patients and nonleper laboratory workers, dispensers, clerks and attendants. In the case of leprosy it is of course impossible to demonstrate the actual efficacy of this procedure.

Through the courtesy of the manufacturers we were given a sufficient supply of the preparation to ascertain its value in other respects. The material was found to have a not unpleasant odor, and its continued use in undiluted form as a protective for the hands has given rise to no case of irritation. The special interest of dettol

as we have used it is its effect in severe ulcerative reaction. A short summary of two or three cases treated with it is given below.

CASE 1.—Chinese, male, aged 60. Admitted with asthma and lepra reaction. Both legs from the knees downwards were swollen and boggy, with undermined purulent ulcerated areas. The evening temperature was 103°F., and the pulse 120. At first the legs were treated daily with a chlorine preparation, and later with moist acriflavine dressings. At the end of a week there was no improvement. On the 7th day two to three ounces of a 30 per cent aqueous solution of dettol was injected intradermally and subcutaneously all over the purulent area. Dressings were applied of gauze soaked in the same solution. Within 24 hours there was a marked improvement in the patient's condition, and the temperature became normal in three days; the asthma had also greatly improved. Daily dressings with 10 per cent dettol were continued. The legs returned to normal during the next two weeks, with only a few small, clean, healing sores. The dressing was then changed to a zinc ointment, and the patient was discharged from the hospital about a week later.

CASE 2.—Indian, male, aged 36. Admitted with lepra reaction, the temperature ranging from 103° to 106°F. There were small foci of leprotic pus all over both lower legs and the soles of the feet, and over the right hand. Blood culture negative. Total white-cell count 22,400. Differential: polymorphonuclears 77.4, lymphocytes 20.4, mononuclears 1.1, eosinophiles 1.1 per cent. Ten days' treatment with antistreptococcal serum, lysol fomentations, and acriflavine produced no improvement. Treatment was distressing, as the daily dressings were not borne with composure. On the 10th day both legs, soles, and the right hand were freely infiltrated with 25 per cent dettol, under sodium evipan anesthesia. The temperature had decreased to 101°F. on the next day, and it gradually fell to normal in about a week. The local improvement was rapid and marked, with the steady amelioration of the general condition.

CASE 3.—Chinese, male, aged 23. Admitted with severe reaction and undermining of skin of feet with leprotic pus. Temperature 100° to 102°F. Treated on the 2nd day with subcutaneous infiltrations of 10 per cent dettol. Completely healed in 10 days.

Eleven cases of (a) multiple subcutaneous pocketing of leprotic pus, or (b) extensive ulceration with pus tracking along the fascial sheaths, have been treated by injection and irrigation with 10 per cent dettol, with very gratifying results. I have found these solutions unsuitable for very prolonged dressings over unhealthy tissue, as the parts tend to get sodden.

Several cases were given experimental injections of 20 per cent dettol intradermally into ordinary lepromatous lesions to ascertain whether the preparation had any curative effect on the disease. These injections caused a slow, mild inflammatory reaction, but they seemed to have no beneficial effect on the lesions.

Twenty-one patients were given intravenous injections of the drug. Eight of them received 13 injections each, and another three from 10 to 12 injections; the others received less than 10 injections. This treatment was given once a week, the dose being increased rapidly from 10 cc. of a 2 per cent solution to the same amount of a 5 per cent solution. There were no untoward symptoms. Almost all of the patients expressed satisfaction and declared that they were better, and three of them showed definite objective improvement. However, neither of these facts indicates that intravenous injections of this preparation are of value in the routine treatment of leprosy.

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