

A Method of Treatment by Intradermal Injection.

As this method has been in use in some of the largest centres for some time, it is felt that a general description of it might be appreciated by readers of *LEPROSY REVIEW*.

The intradermal or intracutaneous method has been employed by the Philippine workers for some years and it was originally described in the *Journal of the Philippine Medical Association* (September, 1929). The objects of this method are twofold :—

(1) To produce a degree of counter irritation and so assist in the absorption of inflammatory products.

(2) To endeavour to bring the drug in direct contact with the bacilli in the lesion.

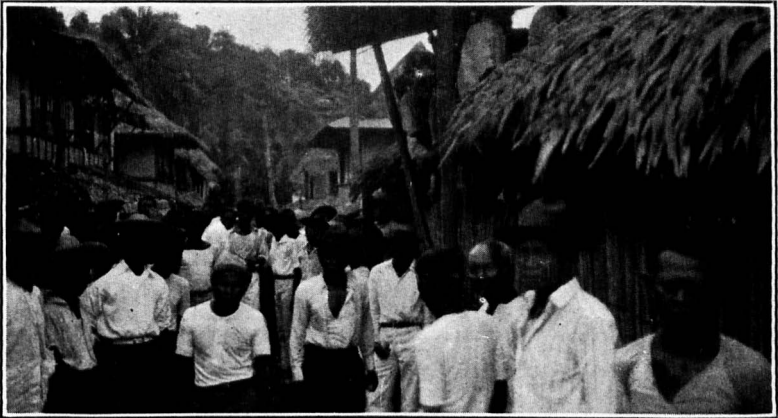
The advantages claimed are that it produces more rapid resolutions of the superficial lesions and that it is relatively free from general and local untoward results. The disadvantages are that it is more painful and takes longer to apply. As a form of counter irritation it appears to be more effective than only applying trichloroacetic acid. The type of lesions that are most suitable for injection are raised macules, infiltrations and nodules. It may be impossible to inject into nodules if they are very tense ; in this case they can be surrounded by a ring of injections.

Technique.

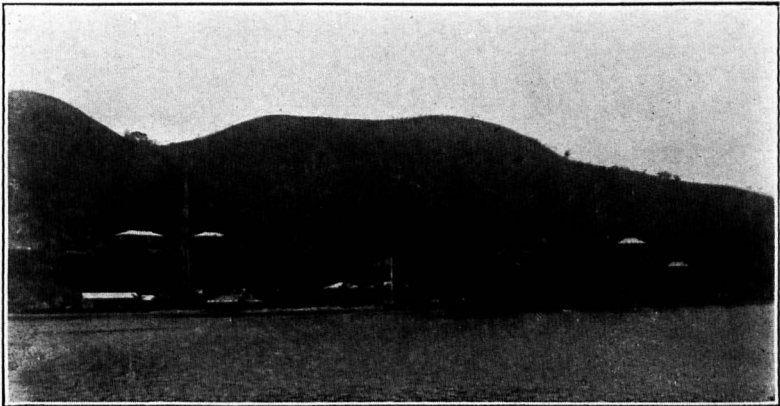
An all-glass or record syringe is used with a fine needle fitted with a guard about two mm. from the point. This prevents the needle penetrating too far into the tissue. The skin having previously been painted with iodine the needle is then introduced into and not under the skin. The thickness of the skin varies in different parts of the body ; where it is thin the needle is introduced in sloping manner so as to form an acute angle with the skin. If it is thicker then it is preferable to insert it at right angles. With a little practice the technique is soon mastered and one finds little difficulty in injecting into the corium and not into the subcutaneous tissues. An amount of the drug is injected so as to raise a



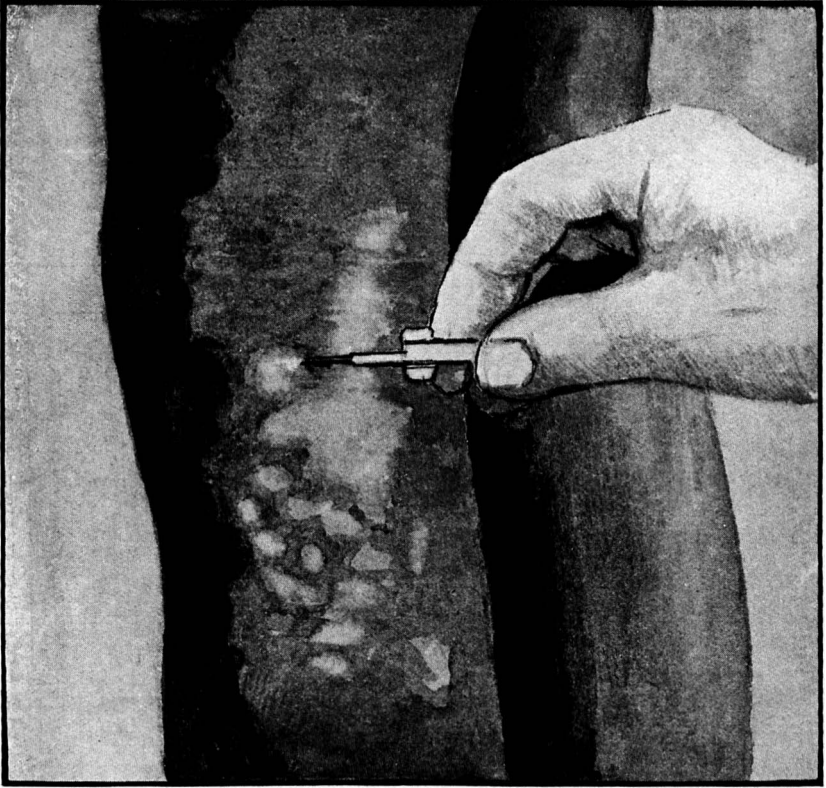
CULION LEPROSY SETTLEMENT, P.I.
(POLICEMEN ARE ENROLLED FROM AMONG THE PATIENTS.)



A STREET IN THE CULION LEPROSY SETTLEMENT, P.I.



VIEW OF CULION ISLAND SHOWING ADMINISTRATIVE BUILDINGS OF SETTLEMENT.



INTRADERMAL METHOD. NOTE THE WHEELS RAISED BY THE INJECTIONS.
(Reproduced from "*Leprosy, Diagnosis, Treatment and Prevention*," Fifth Edition,
by E. Muir, by kind permission.)

wheel of about one-third of an inch in diameter. If a large area is to be injected it is completely infiltrated so as to produce coalescing "injection wheals." (See diagram). Some forty punctures are necessary to inject about 6 c.cs. of the esters.

The esters, alepol or oil can be used for intradermal injections. The oil, however, is inconvenient on account of its viscosity. It has been stated by some workers that alepol causes slight skin hæmorrhages (ecchymoses), but the writer has used alepol to a limited extent and as yet has found no ill effects. A certain amount of the drug is always lost by leakage (15-20 per cent.) this can be prevented to some extent by injecting down so that leakage by downward flow is reduced to a minimum.

If the lesions are small or only few in number so that only part of the drug is used the balance is given intramuscularly or by subcutaneous infiltration.

The Manila conference recommended that not more than 5 c.cs. should be given intradermally at one time and not more than 0.1 c.cs should be injected into any one point in a lesion. It is advantageous to alternate painting with trichloroacetic acid and intradermal injections. The frequency of injections of any one lesion is limited by the local inflammatory reaction.

EDITOR.