

The object of immune therapy is two-fold; curative and protective. Minute doses undoubtedly favour leucocytosis with its consequent fibrous tissue formation in the immediate neighbourhood of the lesion. With gradual increase in dosage a resistance is established which usually protects from relapses.

Judging from its therapeutic effect, I feel that we are now justified in recommending the use of tuberculin in the suspected, and even the healthy subject, with a view of not merely inducing protective immunity, but also of bringing into evidence latent lesions, which, as you know, often remain quiescent for months and even years.

#### DISCUSSION.

Dr. J. H. Elliott.—The reawakening interest in the use of the tuberculins therapeutically demands our attention. The disrepute into which Koch's tuberculin fell was, we fear, not due to the tuberculin but to faulty administration. In the years since it was introduced a number of workers have not given up its use, and to-day we know that the tuberculins are valuable adjuncts to other forms of treatment. Many of the forms in use have been outlined in the paper just read. They vary in their mode of preparation, in their physiological action, and in dosage. It would be advisable to use these very potent drugs—potent as indicated by the dose of two one-millionths of a grain often prescribed—without understanding them, and without exhibiting extreme care in their administration. We should distinguish between those, such as the old tuberculin prepared from sterilized broth cultures, and T. R., and bacillen-emulsion prepared from pulverized living bacilli. From these latter preparations living bacilli have been recovered, and they must be sterilized before use.

The difference in toxicity is illustrated in the case of old tuberculin and tuberculol (Landemann; i.c.c. of the former is borne by a healthy guinea pig, while 1-10 cc. of the latter is fatal to a 250 gui. pig.

We have yet much to learn. We do not know the comparative values of the tuberculins and there is little to guide us in a choice. We do not know the indications for their use, but so far their greatest value seems to be in closed, surgical tuberculosis, and in pulmonary tuberculosis in the earlier cases, before there has been much destruction of lung tissue.

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Landmann:—"Ueber eine neue Methode der Tuberkulose-Toxin-Behandlung." (Hygienische Rundschau, 1900, No. 8.)

Frey:—"Die Behandlung der Tuberkulose mit Tuberkulol." (Wiener Klin. Rundschau, 1906, Nos. 14 and 16.)

Marmorek:—"Archives Générales de Médecine." (No. 47, Nov., 1903.)

Richer:—*Montreal Medical Journal*, September, 1904; *New York Medical Journal*, June 10, 1905.

Irudeau:—"The Therapeutic Use of Tuberculin, etc." (*American Journal of the Medical Sciences*, August, 1906.)