

PRELIMINARY REPORT ON THE RAPID  
FADING OF *M. leprae* IN SECTIONS FROM  
PATIENTS TREATED WITH DIETHYL  
DITHIOLISOPHTHALATE

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All patients on drug trials at this Centre are submitted to skin biopsies at regular intervals, in order to assess the progress of the patient by Ridley's Index (RIDLEY, D. S., Therapeutic Trials in Leprosy Using Serial Biopsies. *Leprosy Review*, **29**, 1; Jan. 1958, pp. 45-52). Our biopsies are processed in the manner described by Ridley.

Immediately after mounting a batch of skin biopsies from patients treated with diethyl dithiolisophthalate (which is the drug 'Etisul' of Imperial Chemical Industries Ltd.), on examination masses of deeply stained acidfast bacilli were seen distributed about the section. The slides were then placed in a 37° C. incubator to dry off the mountant. When next examined in order to assess the Ridley Indices at 24 hours later, the bacilli had faded, and completely so in most cases.

The process was then repeated with a set of biopsies from patients treated with other drugs as control, being processed at the same time and by the same method. While fading again occurred in all Etisul sections, the others remained acidfast.

Biopsies from patients treated with Etisul were then stained, and examined at once and at hourly intervals, to determine the fading time. All sections showed fading between 6 and 24 hours. In one patient who had been treated with one third of a tube of Etisul for only 4 days prior to taking of the biopsy there was fading. Smears on slides, taken from the same Etisul-treated patients, do not fade.

Attempts to prevent this fading in biopsy sections by changing the fixative and reagents used have all been unsuccessful up to date. Fading recurs when the sections are restained.

As it is usual for the person who examines sections to wait 24 hours after staining until the mountant is dry, it seems that a false result may easily be recorded in the process of examining slides from patients under Etisul treatment. Further investigations into this phenomenon are being carried out.

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