

A METHOD OF PRESERVING A STRAIN OF THE TUBERCLE BACILLUS WITHOUT HAVING RECOURSE TO SUCCESSIVE SUBCULTIVATION OR INJECTION OF THE USUAL LABORATORY ANIMALS

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It has been found that when a toad is injected subcutaneously (e.g. in the dorsal sac) with tubercle bacilli the micro-organisms disseminate but are stored in the liver mainly, where they multiply slowly without producing visible lesions and can be recovered by culture or injection of guinea-pigs after several years. Bovine tubercle bacilli were recovered in culture from the liver 1, 2 and over 3 years after subcutaneous injection and tubercle bacilli of avian type were still viable after 900 days in the liver.

The usual laboratory animals—and especially guinea-pigs—are liable to spontaneous infections, both acute and chronic. Acute (or subacute) infections—such as enteritis or pseudo-tuberculosis—can be eliminated by treatment of the passage material with potassium hydrate (neutralization before injection). Of the chronic infections, that with tuberculosis due to ordinary mammalian tubercle bacilli cannot be so eliminated and might be disastrous to the experiment. The toad, on the other hand, is not subject to spontaneous infections and moreover can be kept in confinement for long periods. It was particularly valuable in the case of an abnormal strain of the tubercle bacillus which has up to now proved to be uncultivable.

(MS. received for publication 23. VII. 41—Ed.)