## MORPHIA INJECTOR'S SEPTICÆMIA (WHITMORE'S DISEASE).

BY

A. C. STEVENSON, M.B., D.P.H., Wellcome Bureau of Scientific Research.

The specimens shewn illustrate some points of the pathology of a disease which is fairly common in Rangoon, and in certain ways resembles glanders, but which differs from that disease in there being no skin lesions and in the character of the organism causing it. The disease, first described by Major WHITMORE, was first noticed in a man who had the morphia habit. As it appears to be commoner in such people, it received the above name, but it is not confined to such cases.

Attention was drawn to the disease by the first post-mortem appearances seen—the nodules in the lung; but nodules may also be found in the liver, kidneys, and spleen, while the lungs may be free. When near the surface of the organ, these nodules shew as yellowish areas, surrounded by one of redness, and feel distinctly firm to the touch. On section, caseation is suggested by the appearance, but this practically never goes on to softening, except in a very small way.

Microscopically, the caseating area is seen to be made up of largely distended alveoli, filled with polymorphonuclear and mononuclear leucocytes and endothelial cells. In some areas these are seen to be necrotic. The red area is one of engorgement of the blood vessels and hæmorrhage into the alveoli.

Amongst, and in the leucocytes in the alveoli, small beaded bacilli are seen. They do not retain Gram's stain, nor are they acid fast. Their length and the number of beads in them vary considerably. When cultivated on ordinary media they appear as short rods, with generally two.dark staining dots in them; on salt agar they grow into long filaments. They are motile in the early stages of cultures, but this soon disappears. Inoculation into guinea-pigs invariably leads to a fatal result with the formation of nodules. If only a small dose is used,  $\frac{1}{2}$  to 1 minim of an 18 hours' broth culture, intraperitoneally, enlargement and inflammation of the testicle is got, as in Strauss' sign in glanders, in about 36 hours. With large doses death ensues too quickly. Guinea-pigs are also capable of infection by feeding with cultures.

A full account of the disease and its pathology can be found in an article by Major WHITMORE in the *Journal of Hygiene* of April, 1913, to which I am indebted for what knowledge I have.

The specimens and the parent culture of these shewn was a present to the Bureau from Dr. L. G. FINK, of the Rangoon General Hospital.