

multiple abscesses; diarrhoea; papulo-pustular rash; nasal involvement; phlegmon of forehead.

ROBINS AND BELL. Province of Quebec. *Royal Victoria Hospital Studies*, II, No. I, May 1906.—A hard-working farmer of 46, giving no history and showing no evidence of venereal disease, had in November 1900 a grippe-like febrile attack, accompanied by a couple of slowly developing, painful, acne-like pustules on the forehead, with transient surrounding urticaria. These pustules refused to heal and in the course of a month three large intramuscular foci developed in the left lower extremity, accompanied by occasional sharp febrile movement, though the temperature was for the most part almost normal. Some foci contained pus on incision, others were solid, with a little oily fluid in the centre. All the foci opened or let alone were most persistent, but prompt healing followed the excision of a glandular focus beneath the jaw. Swabbing out foci with liquid phenol was the only local treatment of any value, and even with it results were slow.

When the foci began to develop, a disease contracted from animals was thought of. Inquiry and a personal examination by the writer of the patient's horses led to a diagnosis of glanders, and a positive mallein reaction in four of the horses, when tested by Dr. A. E. Moore, confirmed the diagnosis, though guineapigs inoculated with cultures from the human wound secretions in February, 1901, failed to develop characteristic symptoms. The weight lost by the patient at first was gradually regained. In April 1901 mallein was administered to the patient, one-sixth of the dose used for the horse being employed. Absolutely no reaction followed. A fortnight later the temperature range was higher, there was severe headache, and the urine slightly reduced Fehling's.

On May 28th, 1901, he was admitted to the Royal Victoria Hospital under Dr. Bell, to whom I owe the notes of his stay there. The urine now contained .8 of one percent. of sugar, but this promptly disappeared on the addition of antidiabetic diet and the urine remained normal even after a return to ordinary diet. The glanders bacillus was repeatedly demonstrated by Drs. Archibald and Keenan in the discharge from the sinuses, by culture and inoculation of guineapigs. As a rule the bacillus mallei was present in pure culture. A focus which developed on the occiput in June, apparently in the bone, was opened and scraped on July 20th. He left the hospital comparatively well on September 21st, 1901, though the occipital focus was still discharging.

Following undue exercise, the occipital wound broke down, pieces of dead bone came away, and headache increased. In January, 1902, one of the posterior cervical glands became enlarged and soon broke down. Glycosuria reappeared. Extensive burrowing beneath the skull occurred in various directions, though the lesions seemed entirely extradural.