Clinical and other Notes.

NOTES ON A CASE OF PLAGUE IN ADEN.

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In connexion with a serious outbreak of plague in Aden, which began in January and continued until May, 1928, resulting in a total of 1,494 recorded cases with 1,107 deaths, among the native population, it may be of interest to record the only case that occurred in the British Garrison, the whole of which was protected by inoculation with Haffkine's anti-plague vaccine, shortly after the commencement of the epidemic.

Pte. S., aged 24, of the 2nd Battalion the South Wales Borderers, was admitted to the British Military Hospital from the Crater Barracks on April 10, 1928, after having been taken suddenly ill with a shivering attack. He stated he felt out of sorts two days previously and had a dull headache and pain in the left groin. There was no previous history of illness or injury. He was inoculated against plague early in February.

On admission, his temperature was 105°F. and his pulse 120. He was prostrated, dull, and listless, his face had a muddy flushed appearance, the conjunctiva were suffused, and he looked drawn and anxious. His tongue was covered with a thick brown fur. The left femoral glands were enlarged, tender, and inflamed. Nothing else could be discovered on general examination, though he complained of a pain in the right chest. He was delirious on and off for the first three days.

On the third day of his illness he developed a small pneumonic patch at the base of the right lung. From the first the case presented the clinical appearance of bubonic plague; the patient was admitted direct to the Isolation Block of the British Military Hospital, and the usual sanitary precautions as regards segregation of contacts, etc., were enforced. His condition during the first five days of his illness was extremely critical. General symptomatic treatment was ordered, together with appropriate local applications to the bubo. On the fifth day it was considered that an intravenous injection of twenty cubic centimetres of a one per cent solution of mercurochrome might be beneficial. The amelioration of his symptoms coincided with the administration, for his temperature dropped from 104°F. to normal and his pulse from 92 to 70; the patient looked and stated he felt much better. In twenty-four hours his temperature rose again to 102°F., the intravenous injection was repeated, and was again followed by a drop to normal, where it remained, and the patient rapidly became convalescent.

On the twelfth day the first bubo was opened and drained. On the
seventeenth day a second bubo, also in the left groin, was likewise drained. They both healed rapidly, and the patient made an uneventful recovery.

**Diagnosis and Bacteriological Investigations.**

Though the case from the beginning was clinically typical of bubonic plague, no bacteriological confirmation was forthcoming until the buboes suppurred.

A guinea-pig, inoculated with pus cutaneously, remained healthy. Another guinea-pig, inoculated subcutaneously with pus, died four days later. The post-mortem appearance of this guinea-pig was typical of plague infection. The heart’s blood, spleen and liver were heavily infected with bacilli, having the morphological characteristics of *B. pestis*.

The pus inoculated into agar tubes produced a pure culture of plague-like bacilli, which, when inoculated into a guinea-pig subcutaneously, caused death on the third day; post-mortem appearances of the guinea-pig were typical of plague infection, and bacilli having the morphological appearances and staining reactions of *B. pestis* were found in very great numbers in smears of the spleen, liver, and heart’s blood.

Another guinea-pig, inoculated cutaneously from the culture, died on the fifth day, and post-mortem findings in this animal were also typical of *B. pestis* infection. Subcultures sent to the Central Research Institute,
Kasauli, for verification were reported on as showing typical morphological, cultural, and biochemical characters of *B. pestis*. It is, perhaps, of interest to note that the British and Indian troops, all of whom were fully protected by inoculation, were living in or alongside an area that was heavily infected with both human and rat plague. A few fatal cases occurred amongst the native followers living within or employed in the British Infantry lines, and latterly plague-infected rats have also been detected in the British Infantry lines at the Crater.

The plague epidemic is now at an end; it is fortunate that only one case amongst the British troops has to be recorded.

I wish to express my thanks to Colonel A. E. Hamerton, C.M.G., D.S.O., for his permission to publish the case and for his invaluable advice and assistance with reference to the bacteriological investigation, also to Captain Karandikar, Indian Medical Service, and Doctor Chitre, for their keenness and help in carrying out the same, and to Lieutenant-Colonel E. Phipson, D.S.O., I.M.S., for his suggesting the use of and supplying me with mercurochrome.

**A CASE OF TRAUMATIC MYOSITIS OSSIFICANS.**

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Bandsmen B., aged 21, was admitted on May 12, 1928, to the Military Hospital, Malta, complaining of a large hard mass in the muscles of the inner side of the left thigh, which caused limping and a feeling of tiredness after playing games. On examination he was found to have a hard, bony tumour of very considerable size, irregular in shape, and of stony consistency, lying in the deep thigh muscles, over which the skin was freely movable. No glands were involved; there was no oedema of the limb.

He gave a history of a blow by an opponent's knee on the leg when playing football in January, 1928, which caused a swelling, for which he attended hospital for a period of about three weeks, and for which he received massage. He subsequently returned to duty.

About the first week in April, 1928, he noticed some bruising coming out. He reported sick, and was ordered rest with "bed down" for a week. He then again resumed duty, and carried on until he noticed that a hard lump was developing in the affected part, but he continued to play cricket up to time of admission.

Antero-posterior and lateral radiograms were taken which accompany these notes; it will be noticed that the tumour was of large size, and that there is a solution in continuity between the tumour and the periosteum of the femur just above the point of origin.