

A CASE OF SPIRILLOSIS IN THE HORSE.

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ON the 15th June last I was called to see an Abyssinian pony gelding, the property of Mr G. H. Goldfinch, which had been brought into Nairobi from Donya Sabuk, about forty miles distant.

I found the animal dull, with hanging head, large swellings over

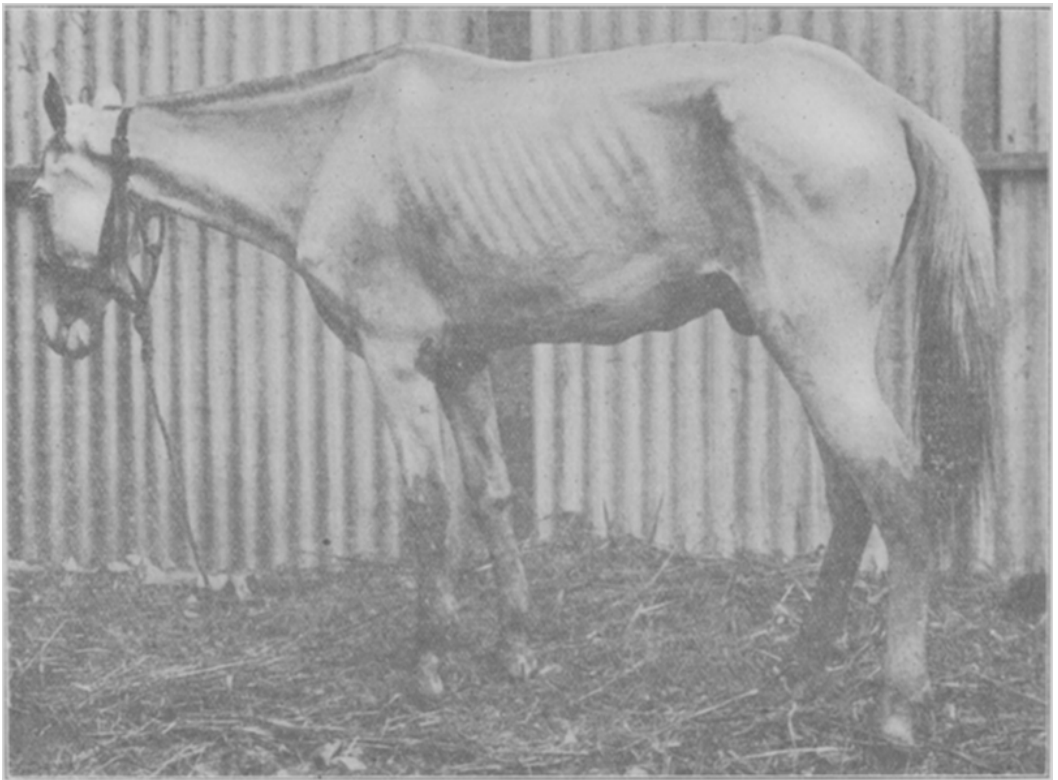


FIG. 1.

Photograph of pony, to show emaciation and cedematous swellings.

the orbits, and acute œdema of the neck; temperature 97° F., the evening temperature 99° .

I diagnosed the disease to be the "dik-kop" form of horse-sickness, which was then and still remains prevalent in the Nairobi district, and a stimulating draught was administered.

The following morning I was surprised to find that the swelling had disappeared from the supra-orbital fossæ and neck, but the œdema had accumulated between the fore-legs, extending backwards towards the sheath; the animal was extremely dull and weak, eating and drinking but little. The temperature had fallen to 95° F., rising

again in the evening to 98° F. Blood smears were taken and examined microscopically, with negative results



FIG. 2.
Right lung, showing enormous infarction.

By Sunday 17th June rapid emaciation had taken place, the œdema between the legs and under surface of the abdomen remained

persistent, and the temperature rose to 99° F. Blood smears again gave negative results. On the 18th the temperature fell to 95° F., rising again to 98° F.; the animal would only occasionally nibble at its food, and stood resting its head on the manger through sheer weakness. Smears were taken from the blood and the œdematous swellings, and, after staining with Leishman's stain, were examined microscopically. In the peripheral blood ten to twelve spirilla were found in each slide,¹ and a few were also demonstrated in the smears from the œdematous swellings. The organisms resembled the spirillum or spirochæte obermeieri.

A dog was injected subcutaneously with 5 cc. of blood drawn from the jugular vein, but the results have been negative.

On the 19th the temperature was 97° F., the animal was propping itself up against the side of its stall, and the emaciation was still more marked.

During the day it gradually weakened, and died about 10 P.M., the temperature shortly before death being close on 101°.

The treatment throughout was confined to stimulation.

A *post-mortem* examination was made early next morning. The carcase was extremely emaciated, and showed very little rigor mortis. Under the anus and between the hind legs were a number of rhipicephalus pulchellus ticks, a very common variety in the district from which this animal came, all cattle, horses, dogs, and game being usually covered with them, while they are also a source of great annoyance to human beings. Around the anus were a few rhipicephalus evertsi ticks, also a very common one throughout the Protectorate.

The muscular tissue had a parboiled appearance; the œdematous swelling contained a gelatinous straw-coloured exudation. On opening into the chest cavity a large clot of blood, somewhat spleen-shaped, was found lying on the surface of the right lung. On removing this clot the pleura of the lung was found to be ruptured, and a huge infarction occupying nearly the whole lobe was exposed. The left lung was practically normal. The stomach contained a few bots and several dark coloured blood-clots, but was otherwise healthy. The spleen, liver, and bowels were of normal appearance. The kidneys, however, were enormously enlarged, pale in colour, and weighed fifty-six ounces each. The bladder was full of pale urine. Smears were taken from all the organs, but no organisms could be demonstrated.

The most marked feature throughout the disease was the rapid and extreme emaciation, the animal, a well-conditioned pony, being reduced to a mere bag of bones in five days.

[¹ Observation confirmed on microscopic examination of preparation forwarded by Mr Stordy. J. M.F.]