

Milk-Fever in Sheep: A Contribution to the Record of Clinical Cases.

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Although milk-fever (*paresis puerperalis*) is commonly thought to occur in cattle only, yet some cases have been described in pigs (Ellenberger, Herz, Wöstendorf) and goats (Schmid, Giovanoli, Tobiassen), and still rarer cases have been observed in sheep (van Hoopen).

On 11.7.33 I was called to the farm Orab, District Gibeon, S.W.A., to investigate the cause of the sudden death of 6 valuable karakul stud-ewes. On arrival I found three sheep dead and one animal sick.

ANAMNESIS.

Orab is situated near Mariental, S.W.A. The Fish River runs through the western portion of the farm, providing ample drinking water in its many pools. The eastern half lies mostly on the so-called "Kalk," a plateau conspicuous by its lime formation. The veld at the time of investigation was scarce, consisting of old grass and bush and is, like that of the whole south of S.W.A., considered to be deficient in phosphates. As practically no rains had fallen in that part for several years, the herbage would be expected to lack vitamins. The herds among which the casualties had occurred were stationed on the "Kalk." The drinking water there is derived from a borehole. It is hard but palatable. The lambing season was in full swing and the ewes, particularly the stud-stock, received an additional daily ration of lucerne hay as well as mealies and oats, 1 lb. per head per day, mixed with 5-6 gm. of calcium phosphate.

Suddenly (between 7.7.33 and 9.7.33), and for no obvious reason, 3 ewes of the best stud flock of 40 head died. The animals had lambed without difficulty. The lambs were strong and healthy.

On the 10.7.33 three more deaths followed, occurring in every instance within 48 to 72 hours after parturition. All the animals which succumbed were in good to fair condition and from five to six years old.

The onset of the illness was sudden. The sheep became apathetic, showed a weakness of the hind-quarters, causing them to sway from side to side, and soon fell to the ground. Once down they were not able to rise again. Their eyes looked sad and sunken. From the nostrils a greyish, dirty liquid was discharged and saliva dripped from the mouth. After death the tongue protruded. In some cases the head and neck were stretched out, in others bent back, presenting the position seen in cattle suffering from milk-fever.

INVESTIGATION.

As already mentioned only one sick sheep was available for examination. The swaying gait and the discharge from nostrils and mouth was noticed. The respirations were infrequent and deep. The pulse was somewhat accelerated (120-125). Examination of the lungs revealed nothing unusual and auscultation of the abdominal cavity gave no clue to a disturbance in the gastro-intestinal tract. The udder was large, giving normal milk.

Post-mortem examinations were made on the three carcasses. Generally speaking the findings were negative: all three animals were in fair to good condition, the body-fat being well developed. The udders abounded in milk. The uteri were in a fairly contracted condition, containing a small amount of chocolate-coloured, opaque fluid. Their mucosa was of a brownish-grey colour. The kidneys showed no lesions. The spleen was not swollen, but the liver and the caecum were in all three cases distinctly hyperaemic. In one case oedema of the lungs and a dilatation of the heart was observed. The brain and the spinal cord in every instance were normal. Microscopically no pathological changes were found in the blood, whilst the muscles showed a hyaline degeneration.

TREATMENT.

No udder-canula nor any indicated drugs (calcium salts) being at hand, the administration of strong coffee was resorted to at once. It has since been reported that the sick animal recovered, and no more deaths have been recorded.

CONCLUSION.

Out of a herd of 40 stud-ewes, six animals died within a short period after parturition. It is a well-known fact that karakul-sheep are particularly rich in milk. Towards the end of pregnancy the animals had been fed well with a diet contrasting much with the scarce and poor veld-grazing to which the sheep in this territory are forced to become accustomed. All the sheep were multipara. The course of the disease as well as the clinical symptoms and pathological lesions are so analogous with the conditions found in cattle suffering from milk-fever, that I feel justified in recording this as an outbreak of milk-fever in sheep.