SHORT COMMUNICATION

NEONATAL DIARRHOEA IN GOAT KIDS

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Diarrhoea is a common complaint in young ruminants, particularly within a few months of life. Many pathogens and poor management practices can cause this problem. The objective of this paper is to describe two (2) clinical cases of neonatal diarrhoea in young goats in the same farm.

A carcass of a 2-week-old male crossbred goat from a twin birth was presented to VRI for complete post-mortem examination. Prior to death, the owner complained that the kid was having yellowish watery diarrhoea for 2 days, accompanied by inappettance and weak. The kid failed to ingest colostrum from the doe during the first week of life due to insufficient colostrum. The weak kid progressively became dehydrated and died. The total population of the farm was 135 animals, with 34 of them below 1 month of age. The animals were kept mixed in one pen and not separated according to age or health status. There were other species of animals in the farm such as dogs, chickens and ducks. Previous history had revealed that 16 kids had died from similar circumstances within a 3-month period. There was no history of deworming programmes or any other treatments done in this farm.

Post mortem examination revealed a thin body carcass with traces of scouring at the tail and anal region. The lungs revealed pulmonary oedema and congestion, whereby 5% of the right apical lobe of the lung was pneumonic. There was also erosion and thinning of the submucosal surface of small intestine and large intestine. Rumen contents consisted of creamy curd-like material and dark remnants of feed particles.

Tissue samples were submitted for further diagnostic investigation. Histological examination of intestines revealed necrosis of superficial mucosa with suppurative inflammation in the Lamina propria. High numbers of coccidia oocysts were found in the intestinal content. Bacterial culture of intestines yielded a mixed growth of *Escherichia coli* and *Streptococcus* spp. This case was concluded as death due to dehydration caused by bacterial and protozoal infection which had damaged the gastrointestinal system.

Following this episode, the farm was subsequently visited and rectal swabs were taken from 10 weak kids that showed the same clinical signs of yellowish watery diarrhoea. Four (4) animals were

having fever (>40°C) and the rest showed subnormal temperature.

All 10 rectal swabs collected from diarrhoeic kids were submitted for diagnostic investigation and revealed the presence of mixed growth of *Escherichia coli*, *Corynebacterium* spp., *Staphylococcus aureus and Streptococcus* spp. by bacterial examination. The farmer was duly advised to improve farm hygiene and send regular samples for follow up monitoring. Types of possible treatments for the bacterial and coccidial infections were suggested. As this farm had a number of twin kiddings, care must be taken to ensure the kids get enough colostrum to maintain good immunity and prevent severe gastrointestinal infections. The overall management should take great considerations with regards to nutritional stress as this can contribute to common ailments in kids.

REFERENCES

1. Duhamel G.E., Moxley R.A., Maddox C.W. and Erickson E.D. (1992). Enteric infection of a goat with enterohemorrhagic *Escherichia coli* (O103:H2). *J Vet Diagn Invest* **4**(2):197-200
2. Munoz M., Alvarez M., Lanza I. and Carmenes P. (1996). Role of enteric pathogens in the aetiology of neonatal diarrhoea in lambs and goats kids in Spain. *Epidemiol. Infect.* **117**(1): 203-211
3. Ministry of Agriculture, Fisheries and Food, Reference Book 368, *Manual of Veterinary Investigation Laboratory Techniques*, Part 7: Parasitology, 2nd Edition (1978)