

Short Communication

A SEVERE OUTBREAK OF ORF INVOLVING THE BUCCAL CAVITY OF GOATS

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Orf or contagious ecthyma is an old but common viral disease of sheep and goats throughout the world which most frequently affects the skin of the lips and occasionally the udder (Abdussalam, 1957; Robinson and Balassu, 1981; McKeever *et al.*, 1988). The involvements of other areas such as the buccal cavity and rumen mucosa have been reported but generally are less frequent (Morales and Van Kruiningen, 1971). This report describes a severe and fatal outbreak of orf involving the buccal cavity of goats.

The outbreak occurred in a herd of 186 goats involving only the 47 suckling kids between 2 to 3 weeks old. The kids were bottle-fed from the age of 2 weeks. Since the herd had experienced a series of orf outbreaks previously with lip lesions, vaccination with a locally produced live vaccine was carried out on every kid for the previous 12-month period.

In this outbreak, 7 (15%) kids were found to have hypersalivation with scabby lesions on the skin around the mouth, and occasionally the skin of the abdomen, as early as 2 days after the start of bottle-feeding. The gum and tongue were markedly swollen, reddened and contained numerous nodular lesions of about 2 to 3 mm in diameter. Many of the nodules coalesced to form larger cauliflower-like lesions. Many kids had suppurative exudate at the lesion. Eleven days later, 29 (62%) other kids were showing similar lesions of which 24 showed simultaneous skin, gum and tongue lesions.

Kids with secondary complications failed to suckle properly, showed severe loss of body weight and death usually occurred within 2 weeks. Sixty-five per cent of the affected kids died. Post-mortem examinations revealed that the lesions only affected the tongue, gum and lips. Those without complications recovered within 3 weeks and eventually regained the lost weight.

The gum and tongue samples were taken using scissors and forceps. They were negatively stained by 2% PTA and examined by electron microscope to confirm the presence of orf virus (Harkness *et al.*, 1977). The examination revealed the presence of numerous orf virus. The viral morphology between the various samples was generally similar.

Orf is one of the most frequent viral diseases in goats, but is considered of low pathogenicity. However, the involvement of organs other than the lips, or orf that affects intensively managed herds can cause great loss (Mazur and Machado, 1989). The lesions as reported here obviously affected the feeding ability and frequently resulted in death particularly in cases with secondary bacterial infection.

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REFERENCES

- ABDUSSALAM, M. (1957). *Journal of Comparative Pathology and Therapeutics*, **67**, 305.
HARKNESS, J. W., SCOTT, A. C. & HEBERT, C. N. (1977). *British Veterinary Journal*, **133**, 81.
MAZUR, C. & MACHADO, R. D. (1989). *Veterinary Record*, **125**, 419.
MCKEEVER, D. J., JENKINSON, D. MCEWEN, HUTCHISON, G. & REID, H. W. (1988). *Journal of Comparative Pathology*, **99**, 317.
MORALES, A. G. & VAN KRUININGEN, H. J. (1971). *American Journal of Veterinary Research*, **32**, 163.
ROBINSON, A. J. & BALASSU, T. C. (1981). *Veterinary Bulletin*, **51**, 771.

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