



MAMMARY FIBROADENOMA IN A CALF – A CASE REPORT

Mammary fibroadenoma is a benign tumour consisting of a mixture of luminal epithelial and stromal cells, and sometimes admixed with myoepithelial cells. It is fairly common in cats and dogs (Misdrop *et al.*, 1999). However spontaneous mammary tumours are extremely rare in other species. Mammary adenoma in bovines has been reported in a young Holstein cow (Mina *et al.*, 1994) and a heifer (Thibault *et al.*, 1997). The tumours are typically seen as soft, circumscribed or somewhat flat appearing growth that are movable on palpation, or a firmly attached growth (seen more in malignancy) anywhere along the region of mammary tissue. This paper reports the

diagnosis of a case of mammary fibroadenoma in a calf.

A female calf aged four months was presented at the University Veterinary Hospital, Mannuthy with a history of enlargement of whole udder since one and a half month (Fig.1).

Clinical examination revealed normal temperature, respiration and pulse. On palpation of udder, a hard mass could be felt. An opaque watery secretion from teats was noted. Ultrasonography, histopathology of biopsy material from udder tissue and exfoliative cytology of secretion was carried out for confirmatory diagnosis.



Fig.1. A female calf with enlargement of udder



Fig.2. Ultrasonogram showing highly vascular udder tissue



Fig.3. Ultrasonogram showing grape sized ovary

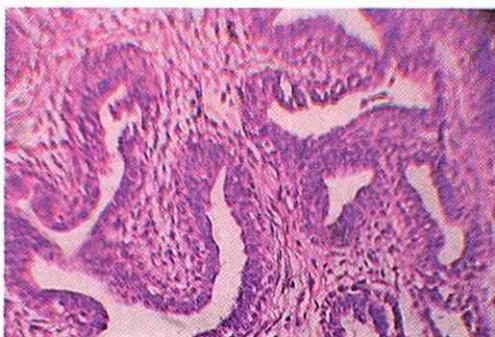


Fig.4. Histopathological section of udder showing hyperplastic mammary glands lined by low columnar to cuboidal epithelium
H&EX100

Exfoliative cytology of secretion from teats revealed neoplastic cells. Ultrasonogram showed highly vascular udder tissue (Fig.2) and ovary of the size of a grape with anechoic core (Fig.3). Macroscopic examination of biopsy specimen revealed fibrous appearance with slimy feel. Gulbahar *et al.* (2007) described similar findings in a three month old lamb with mammary fibroadenoma. Histopathological examination of udder tissue revealed, hyperplastic mammary glands lined by low columnar to cuboidal epithelium (Fig.4). Stroma consisted of hyperplastic fibrocollagenous tissue with scattered lymphocytic and plasma cellular infiltration. These findings are in accordance with that of Thibault *et al.* (1997) and Gulbahar *et al.* (2007). Based on these results the case was confirmed as mammary fibroadenoma. As the owner was not interested in treatment of the case, no treatment was suggested.

Summary

A case of mammary fibroadenoma in a female calf of four months of age and its diagnosis by ultrasonography, histopathological examination and exfoliative cytology are discussed.

References

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