

# UTERINE PAPILLARY CYSTADENOMA IN A DOG

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Uterine neoplasia in the bitch is considered a rare occurrence, accounting for only 0.4 per cent of all canine tumours as per the literature available. Of those tumours reported, leiomyoma accounted for 85 to 90 per cent and the most common malignant neoplasm is leiomyosarcoma (Murphy *et al.*, 1994). Hence, a papillary cystadenoma is reported in the uterus of a bitch.

Female Doberman dog carcass aged four years brought for postmortem examination with the history of vomiting. Grossly, endometrial mucosa showed multiple variable sized cysts (0.1 mm to 1 cm in diameter- Fig.1). On cut section, clear fluid oozed out. Lumen of the uterus contained blood mixed creamy pus. The uterine tissue was collected in 10 per cent formalin and paraffin embedded sections were cut into 5 µm thick and stained by haematoxylin and eosin (H&E) as per the routine procedure. Further, clinically blood picture revealed relative neutrophilia with shift to left indicative of acute inflammation.

Microscopical examination of uterus revealed several cystic spaces involving endometrial glands. Papillary projections into cystic spaces were seen. Variable sized cystic changes (Fig. 2&3) were also seen in the neoplastic papillary epithelial layer. The uterine mucosa was infiltrated with neutrophils, plasma cells and lymphocytes. Papillary cystadenoma was lined by cuboidal type of cells. Based on the gross and histopathological examination, it was confirmed as papillary cystadenoma.

The predominantly reported tumours of

the canine uterus are leiomyoma (Foster, 2007) and less frequently leiomyosarcoma, lipomas and adenocarcinomas (Madewell and Theilen, 1987). Benign tumours are often slow growing and cause no clinical signs until they become quite large. In the present case, benign tumour of papillary cystadenoma was observed along with pyometra. Primary uterine neoplasia is more common in bitches between five and 12 years of age (Cave *et al.*, 2002). Uterine endometrial carcinoma was reported in two years old cross bred dog (Payne-Johnson *et al.*, 1986) and in 10 month old Golden retriever dog (Cave *et al.*, 2002). The present papillary cystadenoma can be attributed to the increased secretion of progesterone which mediates cystic hyperplasia with progression to tumour (Baldwin *et al.*, 1992).

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**Fig.1**  
**Dog-Uterus- Endometrial cysts**



**Fig. 2&3.**  
**Dog- Uterus- Papillary cystadenoma – Papillary projections showing cystic changes within the lining epithelium** Scale Bar H&E 20 mm

