

SURGICAL MANAGEMENT OF UTERINE LEIOMYOMA IN A BITCH

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ABSTRACT

A ten year old female intact spitz weighing 15.5 kg was presented with the history of anorexia, progressive distention of abdomen, straining while urination and pus mixed with bloody vaginal discharge. On clinical examination the animal appeared dull and abdominal palpation revealed a firm mass inside and tentatively diagnosis was made as pyometra. Plain thoracic lateral radiography showed no abnormality while abdominal lateral view radiography revealed a space occupying mass on the caudal abdomen. Haematology revealed reduced haemoglobin while serum biochemistry results were normal. Surgical correction was decided to solve the condition. The animal was anaesthetized using propofol and maintained with 1.5 – 2 % isoflurane in 100% Oxygen. A caudal midventral coeliotomy was performed and uterus was exteriorized. On the body of the uterus a single, firm, round mass was noticed. Panhysterectomy was performed and the mass was around a size of small football shape. Histopathological examination confirmed leiomyoma.

Key words: Uterine leiomyoma, uterine tumor, reproductive tract tumor, dog

Uterine tumors are rare in dogs and cats, constituting less than 0.5 percent of canine reproductive tract tumors (Brodey, 1967). Most often found over ten years of age (Ringler *et al.*, 1997). Baldwin, 1992, reported that 85 to 95 percent uterine tumors are benign (leiomyoma) and 10 percent are malignant (leiomyosarcomas). Leiomyoma of the uterus is a smooth muscle cell of the myometrium and is hormone dependent. Sex hormones are the most important single factor increasing the risk of developing uterine tumor. If treated early and effectively, prognosis is favorable (Baldwin, 1992). The present paper discusses the successful surgical management of uterine leiomyoma in a bitch.

A ten year old intact female spitz weighing 15.5 kg was presented to the Small Animal Surgery Unit of the Madras Veterinary College Teaching Hospital with the history of anorexia, progressive distention of abdomen, straining while urination and pus mixed with bloody vaginal discharge. On clinical examination the animal appeared dull with pale visible mucous membrane and abdominal palpation revealed a mass suggestive of pyometra. Plain lateral abdominal radiography revealed a space occupying mass on the caudal abdomen and thorax revealed no abnormality. Haematology revealed reduced haemoglobin level (8.5 g/dl) while serum biochemistry results were normal.

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After a routine pre-operative fasting, cefotaxime and meloxicam were administered @ 20 mg/kg b.wt and 0.2 mg/kg b.wt intravenously. The dog was premedicated with atropine sulphate @ 0.04 mg/kg b.wt intramuscularly. General anaesthesia was induced with propofol @ 5 mg/kg b.wt 'to effect' intravenously and maintained with 1.5–2 % isoflurane in 100% Oxygen using a Boyles anaesthetic machine.

A caudal midventral coeliotomy was performed and uterus was exteriorized. On the body of the uterus a single, firm and round mass was noticed. Panhysterectomy was performed and the mass was around a size of small football shape (Fig.1). Linea alba and skin were apposed using No.1 PGA in a continuous pattern and silk in interrupted pattern. Histopathological examination confirmed leiomyoma.

Some animals have a greater tendency (genetic susceptibility) to certain diseases, particularly tumour (Baldwin, 1992). The bitches which have hormone imbalance are likely to have smooth muscle tumors (Brodey, 1967). Uterine tumour may obstruct the cervix and cause pyometra and enlarging tumour may impinge on the gastro intestinal tract or urinary tract leading to constipation, abdominal distention and pollakuria (White, 1991). Roberts (2004) reported that uterine tumors may cause irritation, vascular erosion and if get ulcerated bloody discharge comes through vagina. This was in accordance with the present case. The reduced haemoglobin level (8.5 g/dl) might be attributed to the loss of blood due to ulceration of the tumour mass. Ovariohysterectomy is curative for most uterine tumors, with out the evidence of metastasis but it is not so with metastatic lesion

(White, 1991). Surgery has long been considered as the primary option for the vast majority of solid tumors.

Fig.1
Uterine Leiomyoma



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