INTRODUCTION

Ovarian tumors are uncommon in dogs and cats. Canine genital tract tumors accounted 2 percent in bitches (Brearley, 1991). Papillary adenoma is an epithelial cell tumor and account 40 – 50 percent of the canine ovarian neoplasm. The mean age was 10 years and the breed predisposing were Bull dogs and Boxers (Klein, 2001). Ovarian papillary adenoma are less common tumors and frequently bilateral. Some of these tumors are hormone mediated either androgen or estrogen. It had been estimated that atleast half of the deaths in dogs and cats over the age of ten were cancer-related (White, 1991). These tumors carried a favorable prognosis if treated early and effectively (Klein, 2001). The present paper discusses ovarian papillary adenoma and its surgical management in a bitch.

SURGICAL MANAGEMENT OF OVARIAN PAPILLARY ADENOMA IN A BITCH

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ABSTRACT

A ten year old female German shepherd dog weighing 23.5 kg was presented with the history of vomiting, anorexia and polydipsic for three days. Physical examination revealed palpable abdominal mass, swollen vulva and vulval discharge. Abdominal lateral radiography revealed a space occupying mass. After stabilization, exploratory laparotomy was performed and a cauliflower like mass was resected from the right ovary, which was confirmed to be papillary adenoma by histopathological examination.

CASE HISTORY AND OBSERVATION

A ten year old female German shepherd dog weighing 23.5 kg was presented with the history of vomiting, anorexia and polydipsic since three days. Physical examination revealed a palpable abdominal mass, swollen vulva and vulval discharge. Lateral radiography of thorax showed no abnormalities while the abdomen revealed a space occupying mass. Haematological parameters were within the normal range. The serum concentration of blood urea nitrogen (BUN; 60.5 mg/dl) and creatinine (Cre; 2.11 mg/dl) were elevated. The animal was treated with Normal saline (200ml/hr i/v), Ranitidine (0.5mg/kg i/v), Dexamethasone (0.2 mg/kg i/v) and Cefotaxime (20 mg/kg i/v) for a day. After stabilization, exploratory laparotomy performed.

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TREATMENT AND DISCUSSION

Food was withheld for 12 hours before surgery and the dog was allowed to take water up to 4 hours prior to surgery. Cefotaxime and meloxicam was administered at a dose rate of 20 mg/kg b.wt and 0.2 mg/kg b.wt respectively by intravenous route before surgery. The dog was premedicated with Atropine sulphate at the dose rate of 0.04 mg/kg b.wt intramuscularly. General anaesthesia was induced using propofol at the dose rate of 5 mg/kg b.wt ‘to effect’ intravenously and maintained with 1.5 – 2 % isoflurane in 100% Oxygen using a Boyle’s anaesthetic machine.

A caudal midventral coeliotomy was performed and abdominal organs were examined. On examination a cauliflower like mass was noticed on the right ovary (Fig. 1). The mass was exteriorized and removed followed by panhysterectomy. Linealba and skin were apposed using No.1 PGA in a continuous pattern and braided silk in interrupted pattern. Histopathological examination confirmed papillary adenoma. Post operatively same antibiotics and analgesic were administered. Animal had an uneventful recovery.

In the present case serum BUN and creatinine were increased, it was difficult to determine whether the ovarian papillary adenoma affected the renal function or not. Ovarian tumors are named according to the kind of cells, the tumor starts from or whether the tumor is benign or cancerous. There are three types of tumors namely epithelial, germ cell and stromal. Epithelial tumors start from the cells that cover the outer surface of the ovary. Most ovarian tumors are benign and do not proliferate. The most common form of ovarian tumors (80 percent) arise from the outer lining (epithelium) of the ovary. These tumors were also called low malignant potential tumors (LMPT) and borderline tumors (Beckmann et al., 2006). The clinical feature associated with epithelial cell tumors of ovary included abdominal distention, palpable cranial abdominal mass, irregular estrus, anorexia, weight loss, constipation and frequent attempt to urination. In addition, if the tumour was due to hormonal imbalance there will be pyometra and vaginal bleeding (Jergens and Shaw, 1987).

Most ovarian tumors are caused by inherited mutation, so animal with ovarian tumour and their offspring should not be used for breeding purpose. The other way to reduce or eliminate the risk is, the bitches may be bred up to six year of age after that it should be sterilized (panhysterectomy). Early detection of benign ovarian tumors by ultrasound and surgical management carried a favorable prognosis (Klein, 2001).

REFERENCES


Fig. 1: Right ovarian papillary adenoma