

VAGINAL FIBROMA AND ITS SURGICAL MANAGEMENT IN A BITCH

Mohammed Shafiuzama, Shiju Simon M., Sooryadas S. and Suresh Kumar R.

Vulvar and vaginal tumors account for 2.4% to 3% of canine neoplasms (Thacher and Brodley, 1983). They are the second most common reproductive tumors, in female dogs, after those of the mammary gland. The vast majority is benign (86%), arises from the smooth muscles, and is found in healthy female dogs. Most vaginal tumours occur in females aged 10 years or above (Brodey and Roszel, 1983). Mostly, the vaginal tumors are fibromas (43.4%), leiomyomas (18.4%) and lipoma (10.5%). Fibromas are benign, hard, white spherical tumours. They may be single or multiple, and consist of dense masses of collagenous fibrous tissue (Weiss, 1974). Boxer is found to have increased risk over the other breeds (Thacher and Brodley, 1983). This paper discusses the successful surgical excision of the vaginal fibroma in a dog.

Case history and findings

A Doberman healthy female dog of ten years old was presented to the Small Animal Out-Patient Unit of Madras Veterinary College Teaching Hospital, with the history of slow growing perineal mass since one month. The mass protruded out through the vulva while urination. The animal had tenesmus. On vaginal examination, animal evinced pain and the vagina was

pale pink. Multiple masses were palpable, cranial to urethral orifice and on the vaginal floor. They were very hard. Blood parameters were within the normal range. Thoracic radiograph showed no metastasis. Surgical management was resorted to, to get rid of the tumour mass.

Treatment

Food was withheld for 12 hours before surgery and the dog was allowed to take water upto 2 hours prior to surgery. Two hours prior to surgery, Cefotaxime and meloxicam were administered intravenously at a dose rate of 20 mg/kg b.wt and 0.2 mg/kg b.wt respectively. The dog was premedicated using atropine sulphate at the dose rate of 0.02 mg/kg b.wt intramuscularly. Episiotomy site was prepared aseptically. General anaesthesia was induced using propofol at the dose rate of 5 mg/kg b.wt intravenously. After intubation, anaesthesia was maintained with 1.5% isoflurane and vital signs were monitored.

The animal was positioned in sternal recumbency and the hind quarters were raised with the help of a pad under the pelvis. Urethra was catheterized prior to surgery. Episiotomy was performed on the dorsal commissure and the wound lips were deflected to expose the mass which were encapsulated and pedunculated. Tumorous growths were resected along with some healthy tissue. A total of nine masses were resected. The largest one was of a tennis ball size, two were lemon sized, three were walnut shaped and the remaining three were of a tablet size (Figure 1). Bleeding foci were arrested using electro-cautery. After avoiding the urethral orifice, the vaginal mucosa was apposed by No. 5-0 Polyglactin (PGA) by simple continuous pattern. Skin was apposed using silk. The masses, on histopathology revealed fibroma. The mass revealed elongated spindle shaped cell separated

Figure 1. Fibroma removed from the dog



each other by abundant collagenous stroma. Animal had an uneventful recovery.

Discussion

The common benign vaginal tumours are leiomyomas, fibroleiomyomas, fibroma and polyps, and vary only in the amount of connective tissue present. Vaginal tumors occurs in old (10 years or older) healthy females (Fossum, 2002). This was in accordance with the findings of the present case. The location of the tumour varies from vagina, clitoris, vestibulum, perivagina, perivestibulum or perineal area. Most fibromas arise from the vestibule of the vulva rather than from the vagina and it is usually pedunculated, smooth and pale. Extra and intraluminal forms were reported (Thacher and Brodley, 1983). Estrogen is known to influence the development of benign vaginal fibroma in bitches that regress after ovariohysterectomy. Complete surgical excision or early ovariohysterectomy can prevent occurrence of vaginal fibroma. Survival periods range from four months to four years (David and Lubna, 1997).

References

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Authors

1. Dr.Mohammed Shafiuzaama
Associate Professor

2. Dr.Shiju Simon M.
Ph.D. Scholar

3. Dr.Sooriyadas S.
Ph.D. Scholar

4. Dr.Suresh Kumar R.
Professor and Head

*Department of Veterinary Surgery and Radiology
Madras Veterinary College
Tamil Nadu Veterinary and Animal Sciences
University, Chennai-7*
