Urethral and Rectal Obstruction Caused by Vaginal Tumor in a Bitch

Pankaj Gupta$^1$, A.K. Gupta, R.B. Kushwaha, D.K. Dwivedi and Ankur Sharma

Division of Veterinary Surgery and Radiology, Sher-e-Kashmir University of Agricultural Sciences and Technology, R.S. Pura, Jammu-181102.

(Received: 04-05-2013; Accepted: 15-06-2013)

Vaginal and vulval tumors are the most frequent neoplasms of the tubular reproductive tract in the bitch (Herron, 1983) and are more common than tumors of uterus. These tumors affect predominately geriatric and sexually intact bitches with mean age of 9.6 years (Munnich et al., 1999) and are often pedunculated which grow in concentric way either towards the vestibular area or towards the cervix (Thacher and Bradley, 1983). Their growth can impair the function of other organs by compressing the urethra and rectum and affecting local nerves (White et al., 1996 and Tanaka et al., 2001). This paper reports a case of vaginal tumor causing rectal and urethral obstruction in a sexually intact female spitz.

Case History and Observations

A 10 year old intact female Spitz weighing 8 kg was presented in the clinic of SKUAST-J, R.S. Pura with a history of anorexia, dullness, inability to defecate and anuria from the last two days. Owner also reported that the animal had a history of chronic constipation which usually got resolved with the use of laxatives and enemas; and urinary obstruction had occurred for the first time. Clinically, the animal was dull, depressed, recumbent and had tense distended abdomen. Lateral abdominal radiograph revealed obstructed faces in the colon and rectum with a fully distended urinary bladder extending upto nrib cage. On exploration of the vaginal canal with lubricated finger a large nodular mass was palpable in the cranial most part of the vagina which was compressing the neck of urinary bladder as well as colon causing urinary outflow obstruction and constipation. With the consent of owner surgery was planned to remove the growth and perform ovariohysterectomy.

Treatment and Discussion

Enema and urethral catheterization were performed before surgery. After preparing the animal for surgery it was premedicated with inj. Atropine sulphate @ 0.04mg/kg bw i/m Twenty minutes later the animal was anaesthetized using inj. Xylazine hydrochloride @ 2mg/kg i/m followed 10 min later by inj. Ketamine hydrochloride @ 10mg/kg bw i/m. Considering all aseptic precautions the celiotomy was performed through caudal ventral midline incision. Abdominal exploration revealed multiple cysts on both the ovaries. After retroflexing the urinary bladder the growth in the anterior vagina was removed by giving a small incision on the serosa and milking out the isolated growth (wt: 200g size. 8x6x5xcms). The serosal edges were apposed using simple continuous pattern with 3-0 chromic catgut. Then ovariohysterectomy was performed and the abdominal wound was closed in a routine fashion. Post-operatively the animal was given inj. Ceftriaxone @ 20mg/kg bw i/v for 5 days and inj. Meloxicam @ 0.5mg/kg bw i/v for 3 days along with the supportive therapy with 5% DNS and multivitamin injection (lnj. Hivit). The animal recovered uneventfully, skin sutures were removed on 8th day postoperatively and there was no complaint of fecal or urinary retention thereafter. On histopathology it was confirmed that it was a case of vaginal fibroma with presence of interlacing bundles of fibroblasts and collagen fibers.

In the present case the tumor though palpable was not approachable through vagina for surgery so laparotomy was performed through a caudal ventral midline incision. Allen and Crowell (1991) reported that the ventral...
pelvic approach was used when the tumor grew cranially up to cervix in the caudal abdomen and could not be adequately exposed with standard episiotomy. Moreover laparotomy also allowed examination of whole of the genital tract and other organs to rule out spread of tumor to the cranial tract and metastasis, respectively. In the present case cystic growths were found on both the ovaries too. The most common vaginal tumors are benign and include leiomyoma (43%), fibroleiomyoma, firoma, TVT and lipoma. (Slatter, 2003). Wide resection of these tumors with concurrent ovariohysterectomy is the appropriate treatment (Thacher and Bradley loc. cit). In the present case we did not remove the growths in the posterior vagina as the studies indicate the regression of these tumors after ovariohysterectomy (Slatter, loc. cit). In the present case the vaginal growth caused compression of neck of urinary bladder resulting in bladder distension, the growth as well as distended urinary bladder caused rectal compression and constipation. Sahay et al. (1985) also reported a case of urinary incontinence in a bitch caused by vaginal fibroma.

Thus, it was concluded that the urinary and faecal retention in females could also be due to tumors of reproductive tracts and their radical excision along with ovariohysterectomy is the treatment of choice for its cure and to prevent future recurrence.

References