

MANAGEMENT OF VAGINAL HYPERPLASIA IN A BITCH

SANDEEP KUMAR*, ANAND KUMAR PANDEY, GYAN SINGH, NEERAJ ARORA, SANDEEP POTLIYA, KAILASH KUMAR, S.Q. AHMAD and SARVAN KUMAR

Teaching Veterinary Clinical Complex, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar-125 004

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SUMMARY

A five years old, bitch was brought with the complaint of prolapse of a large mass through the vulva for the last two weeks. Clinical examination revealed a red, painless, semisoft and large pedunculated growth protruding through the vulvar lips. Based on the clinical examination and histopathology, the case was diagnosed as vaginal hyperplasia. The protruded mass was successfully removed surgically.

Key words: Bitch, hyperplasia, vagina

Vaginal hyperplasia is one of the important clinical conditions commonly observed in bitches (Kumar *et al.*, 2011) and most of times it is confused with vaginal prolapse and venereal granuloma. In affected females the vaginal mucosa, cranial to the urethral orifice becomes swollen and edematous. If the condition is not managed, the swelling becomes exaggerated and a dome or doughnut shaped mass protrudes from the vulva. In such cases urgent veterinary assistance may be required (Post *et al.*, 1991) Otherwise the exposed tissue may easily be traumatized (Wykes, 1986). The present study places on record the surgical management of vaginal hyperplasia in a pug breed of bitch.

A five years old, pug bitch was brought to the TVCC, Hisar with the complaint of prolapse of a large mass through the vulva for the last two weeks. Clinical examination revealed a red, painless, semisoft and large pedunculated growth protruding through the vulvar lips (Fig. 1). The temperature, heart rate and respiration rates were found to be normal. Based on the clinical examination the case was tentatively diagnosed as vaginal hyperplasia. Therefore, it was decided to perform immediate radical surgery to remove the prolapsed mass.

Surgery was performed under general anaesthesia. The animal was pre medicated with atropine sulphate @ 0.04 mg/kg bw i/m which was followed by xylazine hydrochloride @ 0.5 mg/kg bw i/m and subsequently Ketamine hydrochloride was administered @ 5 mg/kg bw i/m to induce general anaesthesia. The prolapsed

mass was excised as per the standard procedure and a piece of the surgically removed mass was sent for histopathological examination, which confirmed vaginal hyperplasia. After the surgery the animal was given ceftriaxone @ 20 mg/kg bw i/m, phenylbutazone @ 22 mg/kg bw i/m and B-complex 1ml i/m, once daily for five days. Antiseptic dressing of the surgical wound was performed with betadine solution daily for 12 days and the animal recovered successfully.

Vaginal hyperplasia has been observed most frequently in young bitches during the follicular stage of first to third estrous cycles which usually spontaneously regresses during the luteal phase. An exaggeration of this estrogenic response can result in excessive mucosal folding of vaginal floor just cranial to urethral papilla in such a way that redundant mucosa begins to protrude through the vulvar lips (Wykes, 1986). In bitches if the vaginal fold prolapses through the vulvar lips, then amputation of the prolapsed mass has been reported to be the best treatment (Post *et al.*, 1991). Nevertheless, the exposed hyperplastic tissue looks odd and in addition to this, it may also interfere with coitus, therefore, surgical resection has been observed as the best remedy in breeding animals (Wykes, 1986). Boxers and other brachycephalic breeds are most commonly affected (Jones and Joshua, 1982). GnRH has also been used for the treatment of the vaginal hyperplasia in the bitch resulting in the release of LH and cause a subsequent rise in the serum concentration of progesterone. Since progesterone is antagonistic to the effect of estradiol, treatment that increases serum concentrations of

*Corresponding author: sandeepnihar48@gmail.com



Fig 1. Pedunculated growth protruding from the vaginal wall (a) in the bitch and the mass after surgical excision (b)

progesterone might be beneficial in treating such type of cases (Wykes, 1986). Most of the times when the mass is small it may go unnoticed except where the size of the mass is large and visible outside. Though such types of the cases depending upon the nature and severity of the case and the breeds have been successfully treated with hormonal therapy or surgical excision (Antonov *et al.*, 2009; Tiwari *et al.*, 2013) and surgical

excision with ovario-hysterectomy (Mostachio *et al.*, 2007), but keeping in view the size of the mass in the present case, surgery was preferred.

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