

## MANAGEMENT OF TRUE ESTRUAL VAGINAL PROLAPSE IN BITCHES

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### SUMMARY

Vaginal fold prolapse is the protrusion of vaginal wall through the vulva during pro-oestrus and estrus phase of the estrous cycle and is characterized by protrusion of pear-shaped or doughnut-shaped edematous vaginal tissue through the vulva. In the present study, a rare case of true estrual vaginal prolapse in two bitches and their successful repositioning and management is reported.

**Keywords:** Bitches, Estrual prolapse, Vaginal prolapse

True vaginal prolapse is very rare condition in bitch when compared to other vaginal pathologies like vaginal tumors or urethral tumors which protrude into vagina and obstruct the canal (Manothaiudom and Johnston, 1991). Vaginal prolapse usually occur in young bitch preferably less than 2 to 3 years age. It occurs majorly near parturition, as the serum progesterone concentration declines and the serum estrogen concentration increases (Konig *et al.*, 2004; Rani *et al.*, 2004). An amplification of this high serum estrogenic response can lead to disproportionate mucosal folding of the vaginal floor just cranial to the opening of urethra, which ultimately results in protrusion of vaginal mucosa from the vulva.

Two bitches were brought to the Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal. First, a non-descript bitch aged two years with the history of bleeding from the vulva for four days and the second, a pug bitch aged three years with the history of animal being mated two days back. Both had a common history of forceful separation during copulation and exhibited prolapse of the vagina and vaginal fold (Fig. 1 and 2) due to vigorous straining. Examination of the mass indicated vaginal prolapse with its folds without the involvement of urinary bladder. Vaginal exfoliative cytology revealed more of superficial cells with few cornified cells which indicated that the animals were in estrum. The protruded mass has become edematous and hyperemic. Both the bitches have not urinated since last evening and straining was observed during defecation.

Prolapsed mass was washed with 1% KMnO<sub>4</sub> solution. The mass was reduced by dipping the drape in cold water. Lignocaine jelly was applied to desensitize the mass and Cetrimide, an antiseptic cream was applied liberally for lubrication. By applying cold water to the mass, the edema was reduced. By application of bilateral pressure with the fingers from the ventral floor and lateral

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Fig.1. True estrual vaginal prolapse in a non-descript bitch with laceration

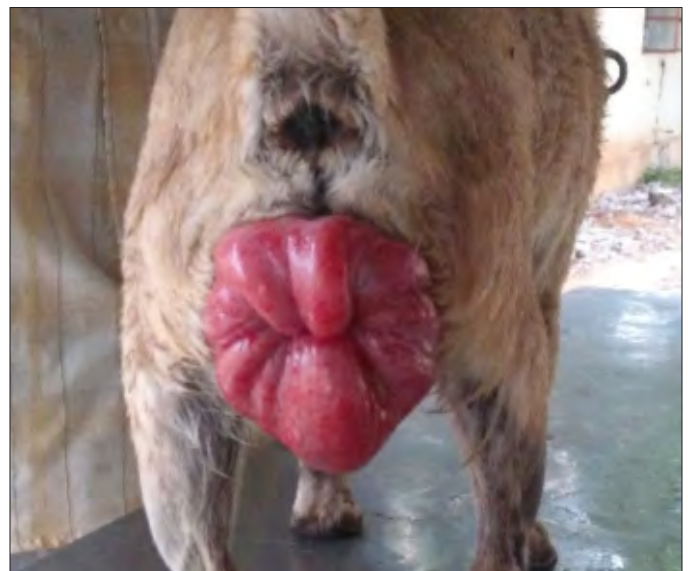


Fig.2. True estrual vaginal prolapse in a pug bitch with intensive edema

sides, the mass was reposed into the body. Modified Buhner suture were applied on the external labia keeping an opening of one finger diameter for the urination. Bitches were kept on Inj. Ceftriaxone @ 15 mg/kg i/v, Inj. neurokind 2ml i/m, Syp. Immunolpet 10 ml p/o for five days and Inj. Human chorionic gonadotropin (hCG) 500 I.U i/m for 4 days to induce premature ovulation. Sutures were removed after two weeks and the bitches recovered eventually.

Vaginal prolapse occur mainly during proestrus or early estrus stages of the cycle (Johnston, 1989) and during or shortly after parturition (Schaefer-Okkens, 2001). Reports suggest that this condition may have some hereditary predisposition and is seen in pure bred dogs (Johnston, 1989). Regression of the protruded mass begins in late estrus to early diestrus, as serum estrogen returns to the normal basal level (Feldman and Nelson, 2004; Alan *et al.*, 2007).

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