FIRST REPORT OF VAGINAL PROLAPSE IN AN OVARIOHYSTERECTOMISED BITCH - A CASE REPORT

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Received for publication July 04, 2008

Abstract

The first case of vaginal prolapse, type III, in ovariohysterectomised 3-year-old Chow-Chow breed bitch, weighing 19 kg, was described. The bitch had developed vaginal prolapse four months after the ovariohysterectomy. Circumferential excision of the prolapsed tissue was performed and finally the bitch recovered as free of the problems. There was no evidence of recurrence of the prolapse in the period of following two years.

Key words: bitch, ovariohysterectomy, vaginal prolapse.

The most common causes of vaginal/vestibular masses in the bitch are vaginal prolapse, vaginal neoplasia, and urethral neoplasia protruding into the vaginal vault (6). Vaginal prolapse is the protrusion of oedematous vaginal tissue into the vaginal lumen and often through the opening of the vulva in intact bitches during the pro-oestrus or oestrus phases of the ovarian cycle (3, 4). Vaginal prolapse occurs less commonly in dioestrus and normal pregnancy (4, 7). It does not occur during anoestrus (4). The disease can be caused by vaginal tumours (9) or trauma (2) but this is fairly rare. True vaginal prolapse may occur near parturition, as the concentration of serum progesterone declines and the concentration of serum oestrogen increases (1, 4, 5).

Vaginal prolapse almost always occurs in intact bitches (4). To the best of our knowledge, we present herein the first report on vaginal prolapse, type III, in an ovariohysterectomised bitch.

Material and Methods

This short communication describes a 3-year-old bitch of Chow-Chow breed, weighing 19 kg, with vaginal prolapse (Fig. 1). The bitch showed no signs of vaginal prolapse during former pro-oestrus or oestrus periods. Ovariohysterectomy was performed to sterilise the bitch approximately four months earlier. Vaginal prolapse occurred ten days before bringing the bitch to our clinic. Upon referral, heart rate, respiratory rate, mucous membrane colour, capillary refill time, and temperature were all within normal limits. A type III of vaginal prolapse was diagnosed.

Fig. 1. Type III of vaginal prolapse in an ovariohysterectomised bitch.

For surgical treatment, the bitch was premedicated with 2 mg/kg, i.m. of xylazine hydrochloride (Alfazyne 2%, Alfasan International BV, the...
Netherlands). General anaesthesia was induced using 10 mg/kg, i.m. of ketamine hydrochloride (Alfamine, Alfasan International BV, the Netherlands). Previously, the urethral opening was identified on the ventral surface of the prolapsed tissue and catheterised. The prolapsed vagina was removed by circumferential excision of the prolapsed tissue.

**Results and Discussion**

Vaginal prolapse is usually seen in younger bitches (<2 to 3 years of age) during their first three oestrous cycles. No breed preposition has been described, although it appears that the incidence of the condition is higher in large-breed bitches (3, 4). Vaginal prolapse is the protrusion of oedematous vaginal tissue into and through the opening of the vulva, occurring during the pro-oestrus and oestrus stage of the sexual cycle. This disorder develops due to accentuation of the normal increase in vaginal hyperaemia and oedema, secondary to the oestrogen stimulus occurring during pro-oestrus and oestrus in the bitch. Vaginal prolapse occurs most commonly during the time of the peak of oestrogen secretion in intact bitches and is probably connected with an individual weakness of the perivulvar tissue of the bitch. Regression of the tissue mass usually begins in late oestrus to early dioestrus, as serum oestrogen concentration returns to the basal level (1, 3, 4, 8). Clinical appearance of type III of vaginal prolapse is the protrusion of the entire vaginal circumference as a doughnut-shaped mass of the vaginal inside. Because the vaginal prolapse always originates from the floor of the vagina, cranial to the urethral papilla, the external urethral orifice is seen on the ventral surface of the prolapsed mass (4, 8). On clinical examination of the present case, the entire circumference of the vaginal wall (including urethral papilla) was protruded through the labia vulvae, but the exposed tissue was not of a “doughnut” shaped appearance. The cervix was not exteriorised. The pale pink protruded vaginal mucosa did not appear severely enlarged and oedematous. The mass was not damaged on surface by foci of abrasion and necrosis. During palpation, vaginal tissue felt flaccid. It easily relapsed and thereafter reprolapsed in a short time. The bitch recovered completely after circumferential excision of the prolapsed vagina. Due to ovariohysterectomy that was performed before, this case is different from those described in previous publications regarding to aetiology, pathogenesis, and clinical appearance of the prolapse (3, 4, 6). Therefore, the report is the first description of type III of vaginal prolapse in an ovariohysterectomised bitch.

**References**