

UNILATERAL BARTHOLIN'S GLAND CYST IN A DOG

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ABSTRACT

A rare case of unilateral Bartholin's gland cyst causing tenesmus in a dog was diagnosed. The cyst was drained and vaginal wall was sutured leading to uneventful recovery

Keywords: Bartholin's gland, Cyst, Dog

INTRODUCTION

Bartholin's glands, first described in 1677 by Caspar Secundus Bartholin, a Dutch anatomist, are two in number, located in the constrictor muscles of the vestibule and secrete mucus most actively at estrus. The duct of the gland opens in the lateral wall of the vestibule by a single duct (Roberts, 1971). The occlusive lesions of the duct of Bartholin's glands lead to formation of retention cysts and may enlarge to 2-10 cm in diameter due to the accumulation of fluid. Bartholin's gland cysts are rare in animals, but are commonly encountered in women (Marzano *et al.*, 2004). The present report describes the successful treatment of unilateral Bartholin's gland cyst that caused tenesmus in a dog.

CASE HISTORY AND OBSERVATIONS

An intact female spitz dog (age, 8 year) had the history of swelling at the perineal area with tenesmus (Figure 1). The enlargement had the history of progression since 4-5 months and the dog had difficulty in urination and defecating. The perineal swelling was soft, doughy, fluctuating and no pain was elicited on palpation. The vaginal examination revealed an outsized, round enlargement covered with vaginal mucosa and attached to the right lateral vaginal wall and was well supplied by blood vessels (Figure 1). The condition was tentatively diagnosed as Bartholin's gland cyst.

TREATMENT AND DISCUSSION

The dog was premedicated (glycopyrrolate @ 0.02 mg/kg, i.v.) followed by induction (propofol @ 6 mg/kg, i.v.) and maintenance (propofol and ketamine @ 1:1 ratio) of anesthesia. Thereafter, episiotomy was performed through the vulval lips in a dorsolateral direction. The catheterization of urethra was performed and the catheter was maintained *in situ* until the completion of procedure. The mass was washed with normal saline and a sterile stab incision was made on the cyst to evacuate the contents of the cyst. The contents were turbid and following complete drainage of contents of around 80 ml, the base of the mass attached to vaginal wall was dissected out (Figure 1). The break in the vaginal wall was sutured using catgut no. 0 and the area was swabbed with povidone iodine. The episiotomy wound was repaired under standard techniques. The culture of cyst contents revealed the presence of bacteria commonly isolated in canine vaginitis like *E. coli*, *Streptococcus* and *Staphylococcus*. The post-operative antibiotic course with ceftriaxone (20 mg/kg b wt) was provided for seven days and the dog had uneventful recovery.

Bartholin's gland cysts are commonly encountered in human beings but are rare in dogs (Sosnik *et al.*, 2007). However, the occurrence of Bartholin's gland cysts was reported in cows due to trauma and extensive laceration at the time of calving leading to local necrotic vulvovaginitis and further obstruction of

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Figure 1: Female spitz dog with swelling in perineal area (left), which had rich blood supply (middle) and was surgically drained and removed (right).

the duct opening (Fathalla *et al.*, 2000). Though many reasons for Bartholin's gland cysts are recognized in literature, it was not possible to ascertain the etiology in the present case.

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