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Management of Bartholin's gland cyst: A study of six cases

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Abstract

Six Jersey Crossbred cows were presented to Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of swelling in the vulval region. Vaginal examination showed unilateral Bartholin's gland cyst. The cyst was drained and infused with Tincture iodine. The cows recovered uneventfully.

Keywords: Unilateral Bartholin's gland cyst, aspiration, tincture iodine

Introduction

The Bartholin's glands are located in the vestibule and have two glands on each side of the vestibule, and its duct opens 2.5 cm caudal to the vagina. Bartholin gland cysts have been reported commonly in cattle (Selvaraju *et al.*, 2010 and Manokaran *et al.*, 2014) [6, 2] and are often misdiagnosed as vaginal prolapse. This case study analyzes six cows with Bartholin's cyst and how it is managed.

Case History and Observation

Six cows were presented to Large Animal Gynaecology Unit of Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal in the past one year with the history of swelling inside the vagina persisting for more than 2 months. Two of the six cases had the history of assisted calving. On Gyneaco-clinical examination, four of the six cows had soft fluctuating mass on right side of vaginal mucosa and two in the left side. Exploratory puncture was done and the structure was identified as cyst. Diameter of the cysts varied from 8 to 16 cm. All the cows were diagnosed with Unilateral Bartholin's gland cyst.

Cows were properly restrained in the travis. Lower epidural anaesthesia was given with 2% lignocaine in the first intercocygeal space. The perineum and external genitalia were washed and then scrubbed. The cyst was punctured and aspirated with the help of 18 G needle and 20 mL syringe. The volume of the fluid varied from 30 to 80 mL. The cystic fluid was collected aseptically and sent for microbial culture. The cystic cavity was infused with 10 to 20 mL of Tincture iodine solution. Collected cystic fluid was straw coloured and turbid in consistency in all six cases.



A: Right unilateral Bartholin's gland cyst



B: Aspiration of cystic Bartholin's gland fluid

7. Unilateral Bartholin Gland Cyst in A Pregnant Heifer
F.U. Sag. Bil. Vet. Derg. 2009;23(1):61-63.

Results and Discussion

The cultures results were negative in all cases studied. All the six cows were reinspected after eight weeks. All were recovered completely without any recurrence.

The Bartholin's glands are a pair of alveolar duct glands located on either side of the vestibular wall. The Bartholin's duct opens into the vestibular wall 2.5 cm from the vagina. The main function of the Bartholin's glands is to secrete mucus during estrus under the influence of estrogen. Mucus enriched with silicic acid, glycidyl radicals and sulphate mucilage (F.U. Sag. Bil, 2009) [7]. These secretions lubricate the vagina during copulation and keep the vagina moist for sperm to survive. Mechanical stimulation of the glands during copulation leads to mucus production due to the presence of vestibular neuroendocrine cells (Russo F *et al.*, 2006) [4].

Trauma occurs during forceful traction of fetus and leads to vulvovaginitis occlude the Bartholin ducts. Only our two cases were associated with this cause. An enlarged gland separates the labia and simulates vaginal prolapse when crawling down. Varying degree of vaginitis was reported (Roberts SJ, 1986 and Fathalla M *et al.*, 1978) [5, 1] and seen in four of our cases due to eversion of vulval lips. It has been reported that *Brucella melitensis* has been isolated from Bartholin gland abscesses in bovines (Peled N *et al.*, 2004) [3]. The presence of a cystic Bartholin gland will not interfere with conception in cows (Roberts SJ, 1986) [5]. Although many different causes have been suggested for Bartholin's cyst, not all six cases studied had a clear etiology. But all six cases responded to treatment and made a full recovery.

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