

Anal sac Impaction in a Male Dog - A Case Report

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Abstract: Anal sac disease encompasses several specific disease entities, includes anal sac impaction, anal sacculitis and anal abscess. A male Spitz dog of about 2 year old was brought with a complaint of dragging the anus along the ground, it was diagnosed as anal sac impaction and treated with antibiotics and finally advised the owner to give more fibre diet.

Keywords: Anal sac and Dog

1. Anatomy of Anal Sac

Anal glands are scent glands located around a dog anus, which produce a strong – smelling oily secretion. Anal sacs are located between the internal and external anal sphincters and store this secretion for territory marking. The anal sacs empty through 2 openings located on either side of the dogs anus. When the anus is stretched as stool is passed, the sphincter muscles squeeze the anal sac and force the contents onto the surface of the stool. When dogs greet each other with familiar sniffing, the secretion from the anal glands is what they are smelling. A Bernard breed of dog will have larger sacs than a pomeranian, but generally healthy anal sacs range from a pea to a kidney bean. Problems occur when the sacs are not emptied on a regular basis during the act of passing stools, normally liquid contents become very thick and plug the openings of the anal sacs. The impacted glands can cause discomfort or worse they can get infected. To ensure that the anal sacs are emptying properly, have them checked on a regular basis. This is simple and painless procedure that should be included in a complete physical examination. If the glands are full they can be easily emptied while the contents are still fluid. It becomes more difficult to empty the anal sacs when the content begin to thicken.

2. Case Report

Etiology and pathogenesis

Anal sacs become impacted, infected, abscessed or neoplastic. Failure of the sacs to express during defecation, poor muscle tone in obese dog and generalized seborrhea lead to retention of sac contents, such retention may predispose to bacterial overgrowth, infection and inflammation.

Clinical findings and lesions

Signs are related to pain and discomfort associated with sitting or defecation, scooting, licking, biting at the anal area and painful defecation. Dyschezia with tenesmus noted. Hard masses were palpable in area of the sac (fig 1) as it was reported by (Meriden and Montgomery., 2012)



Figure 1: Palpable hard mass

The sacs were packed with thick pasty, brown secretion (fig 2) as it was demonstrated by (Rutherford and Leek., 2015)



Figure 2: Brown secretion

which was expressed as a thin ribbon only with a large amount of pressure as it was observed by (Begen and Burnett., 1996).

3. Diagnosis

Physical examination, microscopy, ultrasonography, biopsy was done to diagnose as it was practiced by (Hunter and Ward., 2017). Anal impaction was diagnosed and confirmed by digital rectal examination at which the sacs were expressed. Microscopic examination of the contents from infected sacs revealed large number of polymorphonuclear leukocytes and bacteria as mentioned by (Beynen., 2019)

4. Treatment

Manual expression, flushing, antibiotics, anti-inflammatory medications (fig 3) as reported by (Seo et al., 20120)



Figure 3: Flushing antibiotic

and surgery was done. Impacted anal sacs were gently, manually expressed (fig 4) as practiced by (Rutherford and Leek, 2015)



Figure 4: Manual expression

Saline was infused into the sac, since the contents were too dry to express effectively. Infected sacs were cleaned with antiseptic followed by local and systemic antibiotic therapy as it was practiced by (Gallagher., 2020). Hot compresses applied every 8-12 hours for 15-20 minutes each. Repeated weekly flushing combined with infusion of steroid-antibiotic ointment was done as it was mentioned by (Meriden and Montgomery., 2012). Finally supplement fibre to the diet was advised which will increase fecal bulk facilitating anal sac compression and emptying as reported by (Beynen., 2019).

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