Congenital Rectovaginal Fistula with Atresia Ani and Agenesis of Tail in a Pup

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Abstract
A 3 day old Pug was brought to clinics with a complaint of voiding feces through vulva. The siblings of the puppy were reported to be normal. History, clinical signs and physical examination helped in diagnosing the condition as congenital rectovaginal fistula with atresia ani and the same was repaired surgically on the day of presentation.

Key words: Atresia ani, agenesis of tail, recto-vaginal fistula, pup

Rectovaginal fistula is an abnormal communication between the ventral portion of rectum and dorsal wall of vagina, due to which the vulva functions as a common opening for both urinary and gastro-intestinal tracts (Aronson, 2003). It is characterized by clinical symptoms like voiding feces through vulva, tenesmus, vulvar irritation, mega colon and cystitis. This congenital abnormality is usually associated with imperforate anus or atresia ani, where the rectum fails to open at the anus. Rectovaginal fistula needs early correction to prevent further infection of urogenital system (Farhoodi et al. 1987).

Case History and Observation
A three day old pug was presented to the clinics with a complaint of voiding feces through vulva. The remaining pups in the litter were reported to be normal. Findings of clinical examination revealed mild distension of abdomen, discomfort on palpation of abdomen, muconium at vulvar opening, absence of anal opening and absence of tail (Fig 1). Lateral abdominal radiograph disclosed fluid density in the abdomen with out any clear demarcation of abdominal viscera.

Haematological and serum biochemical parameters were found to be within the normal range. Based on the findings of clinical examination the condition was diagnosed as recto vaginal fistula with atresia ani and agenesis of tail, and it was decided to manage the condition surgically.

Treatment and Discussion
After ascertaining the clinical status of the animal, surgical correction of the congenital deformity was contemplated. Anal region of the affected pup was prepared for aseptic surgery. Anaesthesia was induced and maintained with Isofuran. A cruciate incision was given at the site corresponding to anal orifice and a circular skin opening was made. The incision was extended ventrally up to the dorsal commissure of vulva and fistulous tract was identified. The fistulous tract was resected and the defects in the rectum and vagina were closed separately.

The blind sac of rectum was identified, brought to the level of skin opening and incised and the muconium let out. The edges of the rectal mucosa were sutured to skin with simple interrupted sutures using 2-0 nylon (Fig 2). Operated site was irrigated with normal saline and an indwelling catheter was placed in the anus to maintain patency. The pup was given syrup Cefalexin at the dose rate of 0.25 ml per os BID for 5 days and multivitamin drops at the dose rate of 2 drops per os for 15 days. No signs of tenesmus or straining were noticed during the post operative period. The indwelling catheter was removed on 5th post operative day by which time the animal was voiding feces through the reconstructed anal orifice and no faeces were found in the vagina thereafter.

Rectovaginal fistula is a congenital defect of development of gastrointestinal tract which...
results from failure of the urorectal septum to separate the cloaca into urethovesical and rectal segments (Marretta and Matthiesen, 1989). The prevalence of this condition is unclear, but usually appears in dogs when compared to cats (Burrows and Sherding, 1992). Though there are no reports indicating the breed predisposition to this condition, Johnson et al. (1980) and Rahal et al. (2007) observed increase prevalence in Poodles and Boston Terriers. The etiology responsible for this condition in the present case was felt to be of genetic origin, as the bitch was mated to a dog with common ancestral history. A few reports are available suggesting genetic disorder as one of the etiological factors for congenital atresia ani (Gahnem et al. 2005). Agenesis of tail noticed in the present case, was also observed by Louw and Schouwenburg, (1982) and Rahal et al. (loc. cit) in dogs with rectovaginal fistula.

Conclusion
Rectovaginal fistula with atresia ani in a three day old pup was successfully repaired.

References