

## Surgical Management of Atresia Ani in a cow calf

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### Introduction

Intestinal atresia has been reported as a congenital defect in all species of domestic animals (Van Der Gass and Tibboel, 1980). The congenital abnormalities of the anus and rectum are fairly common in young ones. (Nixon, 1972., Dreyfuss and Tulleners., 1989 and Ansari, 2005). Various surgical techniques have been used to correct atresia ani in domestic animals (Singh, 1989 and Jubb et al., 1993). This report communicates a case of atresia ani in a male calf, which was treated successfully by surgical intervention.

### History and clinical observations

A three-day-old male cow calf of non-descript breed was presented at Teaching Veterinary Clinical Complex, Sardarkrushinagar Dantiwada Agricultural University, Sardarkrushinagar with the complain of non-passage of faeces since birth. On clinical observation, it was found that the calf was not having anal opening (Fig.1). There was soft subcutaneous swelling below the ischial arch with distension of abdomen. The signs of tenesmus and abdominal pain were observed. The case was diagnosed as atresia ani condition and planned for surgery.

### Treatment

The calf was controlled in dorso-ventral position with its hindquarter raised high on a table and restrained. The perineal region below the base of the tail was prepared for aseptic surgery. Local infiltration anaesthesia was performed using injection 2% lignocaine hydrochloride (Zylocaine, Laborate Pharmaceuticals Ltd., Ahmedabad, India) solution at the proposed site of incision. A circular incision was made upon the bulge of the anus and the circular piece of incised skin was removed. Muconium came out immediately. The patency of opening was maintained by application of interrupted sutures by black braided silk # 2 between rectal mucosa and skin to make a permanent anal orifice. Post-operatively, the surgical wound was cleaned and dressed regularly with liquid

povidone iodine and ointment acrilin was applied daily till recovery and injection gentamycin 3ml was given intramuscular daily for 5 days. An antibiotic therapy was followed for 5 days. The sutures were removed on the 10th post-operative day.

### Results and Discussion

The calf showed marked improvement in defecation and general behavior within 3rd day of surgery and uneventful recovery within 10th post-operative day. The present case of atresia ani with its simple form of agenesis (without involving other parts) uneventful recovery after surgical intervention and similar findings in calves were reported by Steenhaut et al., (1976) and Nagaraja et al., (2003). Most affected calves initially will stand and suckle normally after birth. The time for onset of clinical signs of this condition may vary from 1 to 3 days. On collection of history the owner did not see the calf passing muconium or feces was the main observation. The principal clinical signs of condition was straining, tenesmus, colic, depression and anorexia with abdominal distention. The diagnosis of atresia ani is often presumptive based on the age, history, and physical examinations. Atresia ani can be diagnosed by visual inspection of the perineal region or by limited digital palpation if a vestigial anal opening is present. Surgical intervention is the only technique of choice for the treatment in such acute abdominal discomfort and it was attempted successfully in this present case.

### Acknowledgement

Authors are thankful to Dean and Principal, College of Veterinary Science & Animal Husbandry, S.D.A.U Sardarkrushinagar for proving facilities to carry out this work.

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