



Short Communication

ATRESIA ANI: A CONGENITAL DEFECT AND ITS SURGICAL MANAGEMENT IN NEWBORN KID

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ABSTRACT

A day old kid was reported with a distended abdomen and inability to pass meconium due to absence of anal opening, a condition commonly known as atresia ani. This was corrected by surgical intervention and managed successfully leading to complete uneventful recovery of the kid on 10th post-operative day.

KEYWORDS: Atresia ani, surgical intervention, recovery.

INTRODUCTION

Atresia ani is a congenital abnormality which is observed in young animals like calves, lambs and kids [7]. It is a rare congenital malformation that results in an absence of a patent anal opening [4]. It occurs when the dorsal membrane separating the rectum and anus fails to rupture before birth [2]. Four types of atresia ani have been reported namely congenital anal stenosis (Type I); imperforate anus alone (Type II) or combined with more cranial termination of the rectum as a blind pouch (Type III); and discontinuity of the proximal rectum with normal anal and terminal rectal development (Type IV) [9].

Congenital defects are abnormalities of structure or function present at birth which may be caused by genetic or environmental factors or a combination of both and in most cases the cause of the defects are idiopathic [3]. Various surgical techniques to correct atresia ani in animals have been used [6].

History and clinical observations

A day old non-descript male kid was presented to the clinic with history of distended abdomen and non-passage of faeces since birth. On clinical examination it was found that the kid lacked an anal opening (Fig 1).



FIGURE 1. Distended abdomen (a) and absence of anal opening (b)

The kid was dull, depressed and straining continuously to pass faeces. It was diagnosed as atresia ani condition and

was decided to proceed for surgical intervention and correction subsequently.

Surgical management

The kid was restrained in dorso-ventral position over a table. Initially the abdomen was compressed manually to locate the development of bulge in the perineal region. Then the perineal region below the base of the tail was prepared for aseptic surgery. The surgery was performed

under ring block local anaesthesia by infiltrating lignocaine hydrochloride 2% solution at the planned site of incision. A circular incision was made around the bulged area of the anus and the excised skin was removed. Instantaneously meconium and some amount of air came out through the circularly incised area (Fig 2).



FIGURE 2. Meconium coming out

The patency of the opening was maintained by placing a 2 ml syringe barrel. The mucosa of the rectum was then sutured to the skin with braided silk No 2 by simple interrupted suture. Post-operatively the animal was given oral antibiotic- Enrofloxacin tablet @ 5 mg/kg body weight for seven days and analgesic- Meloxicam @ 0.2 mg/kg body weight intramuscularly for two days. Dressing of the wound was done on alternate days for a period of 10 days and fly repellent ointment was applied daily around the operative site. The sutures were removed on 10th day post-operatively.

RESULTS AND DISCUSSION:

The kid showed marked improvement in general behaviour and defecation within 3rd day of surgery with uneventful recovery at 10th day post-operatively. The present case of atresia ani was simple form of agenesis without involvement of other parts. Similar findings were reported in two day old male kid^[5] and a non-descript calf^[1,8]. The kid with atresia ani condition suckled normally after birth and developed clinical signs within 24 hours while some authors^[5,8] mentioned that the onset of clinical signs of this condition may vary from 1 to 3 days. The clinical signs of the condition were tenesmus, distended abdomen, anorexia and progressive depression. The reason for early onset of clinical signs in our case may be due to suckling of more quantity of milk from the doe.

CONCLUSION:

The diagnosis of atresia ani can be done based on history, age and detailed clinical examination of the animal and prompt surgical intervention is required to relieve the animal from the abdominal discomfort and for better prognosis.

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