Surgical management of congenital atresia ANI (Imperforate anus) in a lamb: A case report

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Abstract

Atresia ani is a failure of development of the anal opening. It is a congenital abnormality, manifested clinically by an absence of faeces, dullness, anorexia with abdominal distension, discomfort and straining at an attempt to defecate. Rectal lumen usually bulges subcutaneously at normal site of the anus when the abdomen is compressed. Surgical treatment is the only course of action. This paper reports a case of lamb with atresia ani and also gives the surgical procedure adopted.

Keywords: Atresia ani, Congenital abnormality, Rectum, Tenesmus

1. Introduction

The congenital abnormalities of anus and rectum are common in farm animals [6]. Atresia ani (imperforate anus) is the failure of the anal membranes to break down. This falls under the genre of congenital abnormalities which has been reported in all domestic animals. The causes of this congenital defects may be genetical or environmental of both, but in many cases the cause is unknown [1]. The most common bovine environmental teratogens include toxic plants consumed by the dam and maternal fetal viral infections during gestation and the majority of genetic defects in cattle are inherited as recessive [5]. Various surgical techniques have been used to correct atresia ani in domestic animals [7]. Atresia ani is a congenital abnormality characterized by persistence of the anal membrane resulting in covering the normal anal canal or is the failure of the anal rectal membrane to break down [3].

Case History and Clinical Observation

A male lamb was presented to the Veterinary Dispensary, Koppole, Nalgonda with the complaint of non-passage of faeces since birth. On clinical observation, it was found that the lamb was not having anal opening (Fig 1). There was soft subcutaneous swelling below the ischial arch with principal clinical signs of dull, depression, anorexia, attempt of defecation and mild abdominal distention. Also the signs of tenesmus and abdominal pain were observed but does not voided out the faeces. The case was diagnosed as atresia and handover for surgical intervention.

Treatment and Discussion

The perineal region below the base of the tail was prepared for aseptic surgery. The lamb was contoured in sternal recumbency and local infiltration was achieved with 2% lignocaine hydrochloride. A cruciate incision was made over the bulging of the anus and ends of the incision were united to dissect out a circular piece of skin (Figure 1). The rectum was exposed after separation of the perineal muscles and the blind end of the rectum was brought to the level of anal sphincter and fixed to the perineum after duly snipping the tip of the blind end of the rectum. After opening muconium was observed (Figure 2). The circumference of the rectal opening was sutured by application of interrupted sutures using braided black silk No. 1 between rectal mucosa and skin to make a permanent anal orifice. Post-operatively, amoxicillin-clavulanic acid @ 500 mg for 5 days and meloxicam @ 0.5 ml for 3 days were administered intramuscularly followed by routine dressing with povidone iodine ointment and application of topical spray as a fly repellent. The lamb showed normal in defecation with minimum tenesmus and active in nature on the 3rd postoperative day and the sutures were removed on 10th post-operative day. It was also found with other congenital defects reported by various authors like anus vaginalis [4], atresia ani with scrotal anomaly [2] and recto-vaginal fistula with atresia ani [1]. But in this present study atresia ani was observed alone.
Fig 1: Photograph showing the circular incision at rectum

Fig 2: Photograph showing the muconium immediately after incision.

References