



Successful Management of Paraphimosis in Two Cow Bulls of Lakhimi Breed

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Abstract

The present communication describes the successful management of paraphimosis in two cow bulls belonging to the Lakhimi breed. Both the bulls were initially treated using medicines, to which one responded but the other bull required surgical intervention.

Keywords: Bull, Lakhimi breed, Paraphimosis, Purse String Suture, Reuffs Method

Introduction

Paraphimosis is an ailment, where the protruded penis is unable to return into the prepuce following trauma or any other diseases (Mahesh *et al.*, 2016, Ravikumar, 2019). It is most often seen after semen collection or coitus, i.e. after penile erection (Venugopalan, 2015; Davidson, 2016). The other reasons for paraphimosis are priapism foreign objects around the penis and constricting band of hair at preputial orifice (Davidson, 2016). Neal (1960) reported that it may be either due to the constriction of prepuce behind the glans penis or swelling of glans penis, making it impossible to draw the organ back through the natural preputial orifice. Paraphimosis may be congenital or acquired. Congenital condition like narrowness of the preputial orifice or shortened preputial sheath may predispose to paraphimosis, on the other hand acquired paraphimosis may occur due to trauma and infection (Ramani, 2010). The clinical signs may vary depending on the extent of constriction of the penis and the duration of occurrence.

Case History and Observation

Two cow bulls of Lakhimi breed, weighing nearly 300kgs and 2½ years of age (represented here as A & B), were presented to Veterinary Clinical Complex with the history of penile protrusion from the preputial orifice and unable to retract it back since last few days. History revealed that both the bulls went missing from the herd for 2 to 3 days and came back with this condition. Partial anorexia was also reported; however, both the bulls were able to pass urine normally. The other clinical parameters were within the normal physiological range. The bulls were physically restrained in right lateral recumbency by Reuff's method for clinical examination and treatment. The protruding glans penis was seen to be oedematous and was soiled with dirt, debris and mild necrotic tissues in both the cases (Fig. 1). Adhesions and mild pus was also present between the preputial skin and the glans penis. Both the cases were diagnosed for paraphimosis and were initially decided for therapeutic management.

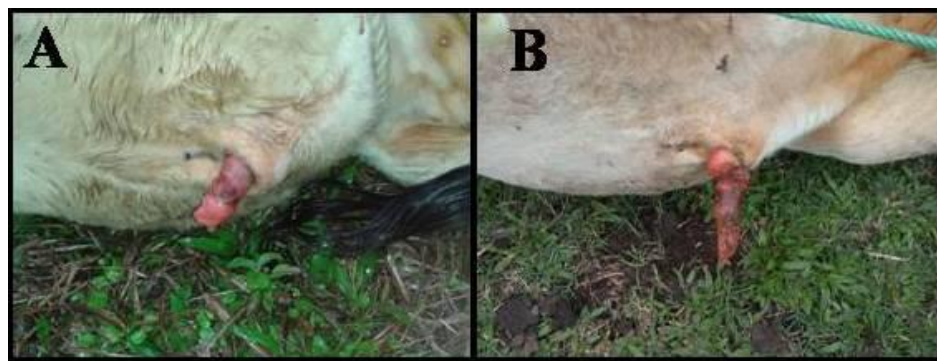


Figure 1: Photograph showing cow bulls, (A & B) on the day of presentation

Treatment

Both the bulls were treated similarly. The 10% Lignocaine spray was applied on the glans penis. After approximately, 10 minutes, the penises were cleaned for 3-4 times using 0.1% KMnO₄ solution. All the dirt, debris, necrotic tissue and pus were cleaned off the penis. The adhesions between the preputial skin and the penis were separated with the help of an artery forceps. The penis was painted with 5 % w/v Povidone-iodine solution diluted at the ratio of 1:1 ratio with normal saline. The medicinal care included, a long acting antibiotic, inj. Enrofloxacin @ 3ml/40kg body weight (Flobac SA[®]: Intas pharmaceutical Ltd.) intramuscularly at 72 hours interval for three occasions along with an anti-inflammatory, inj. Meloxicam Hydrochloride @ 0.3mg/kg b.wt (Melonex[®]: Intas pharmaceutical Ltd.) and an antihistaminic, inj. Chlorpheniramine Maleate @ 0.5mg/kg b.wt (ZEET[®]: Alembic Pharmaceuticals Ltd.), intramuscularly once daily for 5 days. The owner was advised an antiseptic spray (Topicure Plus[®]: Natural Remedies Pvt. Ltd) locally three times daily and a bolus of Serratiopeptidase (Inflawin Forte[®]: Excellar Health Care Pvt. Ltd.) orally two times daily for 5 days along with all injections as per the prescription. The owner was advised for a follow up visit after 5 days.

On 4th day, the owner reported that the bull A' has completely recovered (Fig. 2) with normal physiological functions without any complications but the bull B' was same as before. The bull B' was again casted and 2ml of 2% Lignocaine HCL was injected in the adjoining preputial sheath dorsally. The site was aseptically prepared. The protruding penis was cleaned; the adhesions were broken and were reposed in the preputial sheath after giving a small linear incision dorsally on the preputial orifice. The incision was closed using simple interrupted suture pattern

and purse string suture was applied at the orifice using no. 1 black braided silk to prevent recurrence. Post surgically antibiotic, analgesic, antihistaminic and topical spray as mentioned above was administered for another 4 days. On 10th post-operative day, the sutures were removed and satisfactory recovery was noticed (Fig. 2).

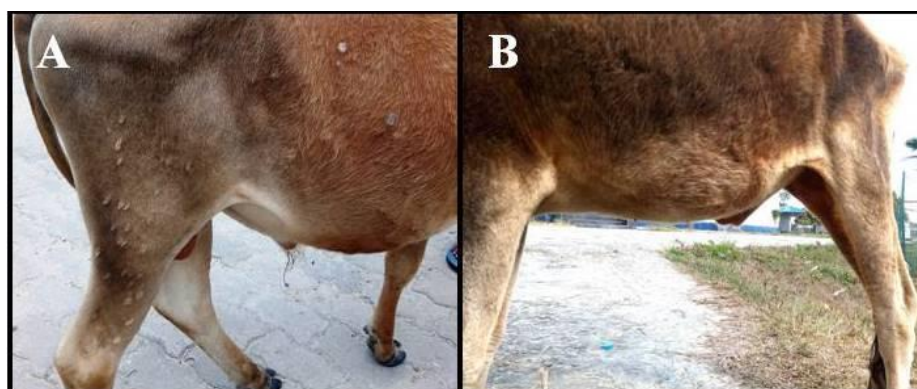


Figure 2: Photograph showing bulls (A & B) after complete recovery

Discussion

The suspected etiology behind the cases discussed here, might be the trauma from coitus leading to an acquired infective paraphimosis. Therapeutic management offered in this report was at par with Venugopalan (2015). Moreover, due to presence of pus material repositioning and application of purse string suture was not attempted in the very first day. In bull “A” the condition was mild with less odema and therefore, it responded to the medicinal therapy (Mahesh *et al.*, 2016). However, surgical intervention becomes obligatory in bull “B” due to chronic condition with more odema and adhesions (Ravikumar, 2019; Neal, 1960).

Conclusion

The report concludes that depending upon the severity of case early cleaning and reposition of glans penis (with or without surgical intervention) along with the medicinal therapy is required for the successful management of paraphimosis.

Conflict of Interests

There is no conflict of interest.

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