

PERIPARTURIENT THIRD DEGREE PERINEAL LACERATION ASSOCIATED WITH RECTO-VAGINA FISTULA AND RECTAL POUCH FORMATION IN A GRADED MURRAH BUFFALO

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ABSTRACT

Apostpartum graded Murrah buffalo that calved 25 days before was presented with a history of swelling of the perianal region immediately after parturition. On examination, ventral anal region was found to be enlarged with a pouch that contained around 1.5 kg of dung. The buffalo was given caudal epidural anaesthesia and the perianal mucous membrane was scarified and sutured. Postoperatively antibiotic, anti-inflammatory and anti-histamine were given for 5 days and animal exhibited normal defecation without straining. The correction of unusual case of peri-partum third degree perineal laceration associated with rectal-vaginal fistula and rectal pouch formation in a graded Murrah buffalo, its management and successful recovery is reported.

Key words: Buffalo, recto-vaginal fistula, rectal pouch, peri-partum

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Perineal laceration is the term for lacerations that occurs at the perineal area which is rarely caused by the birth of offspring in cattle and involves structures within the perineum (Hudson, 1972). It is categorized into 3 degrees of severities, namely the first, second and third degrees. First degree perineal lacerations usually involve only the mucosa of the vulva and vagina and they are often unnoticed without close examination after parturition. Meanwhile, second degree

perineal lacerations extend into the submucosa and muscularis layer of the vulva and vagina, the anal sphincter and the perineal body. This will compromise the ability of the muscles to constrict the vestibule and also causes the perineum to sink cranioventrally which can predispose the animal to pneumovagina and urine pooling (Noakes, 2009).

Lastly, third degree perineal lacerations and will include the recto-vaginal septum, the muscles of the vagina and rectum, and the perineal body. They usually create a common rectal and vestibular vault, permitting direct fecal contamination that result in bacterial infection of the vagina, cervix, and uterus (Noakes, 2009). Repair of perineal laceration would minimize the complications like urine pooling and further postpartum uterine infections and hence infertility (Youngquist and Threlfall, 2007; Vieira-Neto *et al.*, 2016). The aim of the present report is to provide a record of successful surgical correction of third degree perineal laceration associated with recto-vaginal fistula and rectal pouch formation in a graded Murrah buffalo.

Case history and Observation

A graded Murrah buffalo on its second parity was presented to Large Animal Obstetrics ward, Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of swelling of the perianal region (Fig.1). The swelling was observed immediately after the normal parturition and animal calved 25 days before. On examination, ventral anal region was found to be enlarged (Fig.1, 2, 3) with a pouch which

contained around 1.5 kg of dung. Based on the history and clinical observation, the case was diagnosed as peri-partum third degree perineal laceration associated with recto-vaginal fistulae and rectal pouch.

Treatment and Discussion

After induction of epidural anaesthesia the perineal region was washed with 2% Potassium Permanganate (KMNO₄) solution and the dung in the rectal pouch was removed. The pouch was washed with 2% Potassium Permanganate (KMNO₄) solution and applied with povidone iodine. The mucous membrane in the perianal region was scarified (Fig.4) and the pouch was closed by double rows of continuous lock suture pattern with chromic catgut No.2 (Fig.5). Postoperatively Ceftriaxone @ 20 mg/kg i/v (Buragohain *et al.*, 2021), Meloxicam @ 0.2 mg/kg i/m and Chlorpheniramine maleate @ 0.5 mg/kg i/m were given for 5 days and animal exhibited normal defecation without straining (Fig.6) within a week.

Perineal laceration in dairy cows may cause abnormal conformation of the reproductive passage leading to infertility (Vieira-Neto *et al.*, 2016). Perineal lacerations rarely occur during parturition in cattle especially in first calf heifers and quite common in equines due to the offspring's long extremities and forceful straining at the time of second stage parturition (Hudson, 1972). However, in the reported case third degree perineal happened at the time of fetal delivery which led to recto-vaginal fistula where in the dung started accumulating that results in



Fig. 1. Perineal region enlarged containing around 1.5 kgs of dung

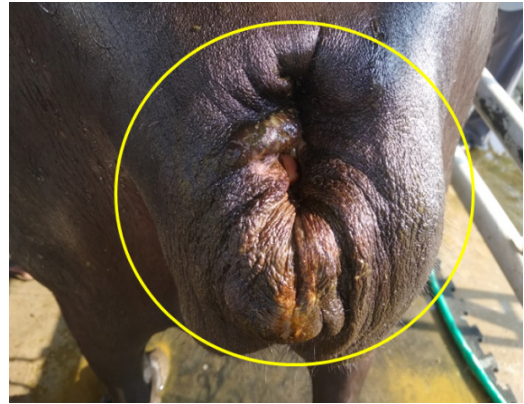


Fig. 2. Rectal pouch



Fig. 3. Recto-vaginal fistula in the perineal region



Fig. 4. Scarification of the mucous membrane in the perineal region



Fig. 5. Suturing the rectal pouch in the perineal region



Fig. 6. Animal defecating normally after a week

rectal pouch formation (Fig.1). Since the case was presented a month later parturition, the perineal repair was attempted by scarification of the mucous membrane on perineal region (Fig.4) and the pouch was closed with double rows of continuous lock suture pattern with chromic catgut No.2 (Fig.5). Scarification hastened the healing process and after a week animal defecated normally without straining (Fig.6). The present case report puts on record the successful management and recovery of third degree perineal laceration with recto-vaginal fistula and rectal pouch in a graded Murrah buffalo.

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