

SURGICAL MANAGEMENT OF RIGHT POST CERVICAL UTERINE TORSION DURING 75 DAYS OF GESTATION IN A GRADED MURRAH BUFFALO

**S. Prakash*, M. Selvaraju, K. Ravikumar, M. Palanisamy,
S. Manokaran and R. Ezakial Napoleon**

ABSTRACT

The present communication reports a rare case of dystocia due to uterine torsion in a pluriparous graded Murrah buffalo during 75 days of gestation and its successful management by caesarean section.

Keywords: *Bubalus bubalis*, buffaloes, dystocia, uterine torsion, caesarean

INTRODUCTION

Uterine torsion is the revolution of the gravid uterus in its long axis (Rakuljic-Zelov, 2002) which leads to twisting of the birth canal causing dystocia. Uterine torsion is usually observed in advanced pregnancy immediately before parturition (Roberts, 1986). Arthur *et al.* (1989) stated that uterine torsion usually occurs during late first stage or early second stage of labour. But the occurrence of uterine torsion before seventh month of gestation in cows and buffaloes is unusual (Roberts, 1986). Perusal of literatures revealed that the occurrence of uterine torsion during first trimester of gestation is very rare. The present report places a record on occurrence of uterine torsion at 75 days of gestation

and its effective timely management by caesarean section in a graded Murrah buffalo.

HISTORY AND OBSERVATIONS

A 75 days pregnant graded Murrah buffalo was referred to the Teaching Veterinary Clinical Complex, Veterinary College and Research Institute, Namakkal with the history of straining for the past 48 h. The general clinical examination revealed dull and depressed buffalo with reluctance to move. The rectal temperature was normal but the pulse and respiratory rates were elevated. Per rectal examination of the animal indicated more than 180° right-side uterine torsion. On per vaginal examination, it was unable to palpate the cervix and the birth canal was twisted towards the right side. Hence, the case was diagnosed as maternal dystocia due to post-cervical right-sided uterine torsion.

TREATMENT AND DISCUSSION

Considering the stage of pregnancy and location of the uterus at 75 days of gestation, it was planned to perform caesarean section to correct the uterine torsion. Animal was restrained and surgical

site was prepared for aseptic surgery. Paravertebral nerve block, epidural anesthesia along with inverted 'L' block was induced by infiltrating 2% Lignocaine hydrochloride at appropriate sites. A linear skin incision of about 12 cm was made on the upper flank region (Figure 1). Laparotomy was performed as per standard procedure and the uterus was located at the level of pelvic brim. The uterine wall was incised in longitudinal fashion over the greater curvature. The fetus was extracted (Figure 2), fetal fluids were drained and the placenta was removed. After thorough washing with normal saline (Figure 3) the uterine incision was closed by double row of cushing suture pattern by using chromic catgut no.2 (Figure 4) and the detorsion was carried out as per the procedure of Sharma *et al.* (1995) (Figure 5). The peritoneum and muscles were closed by continuous interlocking suture pattern (Figure 6) and skin was closed by interrupted cross mattress suture pattern (Figure 7). Clinically the dam was treated with Inj. Streptopenicillin (5.0 gm, i/m), Inj. Meloxicam (150 mg, i/m), Inj. Chlorpheniramine maleate (300 mg, i/m), Inj. Oxytocin (30 IU, i/v), Inj. Calcium borogluconate (450 ml, i/v) and Inj. 5% Dextrose Normal Saline (3 liters, i/v). The

postoperative care with antibiotic, antihistamine and intravenous fluids was continued for six days. The suture was removed on 10th day and the animal had an uneventful recovery.

Uterine torsion is a common cause accounts for maternal dystocia in buffaloes, and the direction is usually right side in more than 90% of the cases (Roberts, 1986). Predisposing factors includes relatively long uterine ligaments, the low number of smooth muscle cells in the broad ligament, constant confinement, and hilly terrain (Ahmad, 2001). Uterine torsion might occasionally be diagnosed between 5th and 8th months of gestation (Roberts, 1986; Ruegg, 1988). But in the reported case, it was diagnosed and successfully treated by cesarean section at 75 days of gestation. The death of the fetus in the present case might be attributed due to the delay in presentation of the animal to the clinics leading to fetal hypoxia due to separation of fetal membranes. The uterine torsion could be corrected by several methods *viz.*, rolling the cow, Schaffer's method, use of a detorsion rod, and by cesarean section (Roberts, 1986; Arthur *et al.*, 1989). The reported animal was about 75 days gestation which could not be corrected by simple

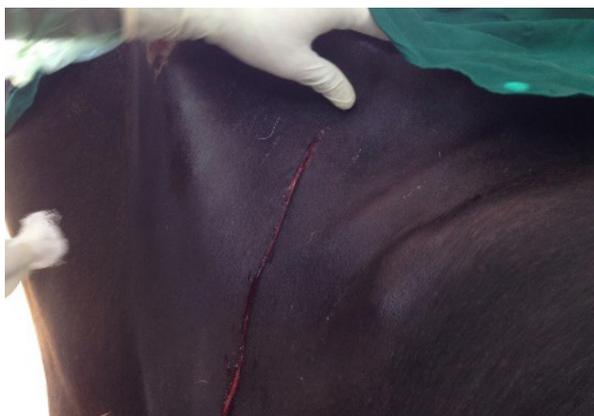


Figure 1. A linear skin incision of about 12 cm was made on the upper flank region.



Figure 2. The fetus was extracted.



Figure 5. The detorsion was carried out as per the procedure.



Figure 3. washing with normal saline.



Figure 6. The peritoneum and muscles were closed by continuous interlocking suture pattern.



Figure 4. uterine incision was closed by double row of cushing suture pattern by using chromic catgut.



Figure 7. Skin was closed by interrupted cross mattress suture pattern.

rotation or by Schaffer's method of rotation due to the location of the uterus at the level of pelvic brim and also due to the stage of gestation. Hence, the caesarean was performed to successfully manage the case.

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