**ABSTRACT**

A pluriparous full term pregnant Murrah buffalo at its four parity was presented to veterinary hospital in Namakkal Veterinary College with history of restlessness, anorexia and excessive straining showing no progress of parturition from last 12-24 hours. The case was diagnosed as dystocia due to post-cervical uterine torsion and a dead fetus was successfully relieved after detorsion of the uterus by modified Schaffer's method. Following delivery of four Steclin boli (Tetracyclin 500mg) intrauterine, single dose of 5 L 5% DNS and 450 ml Mifex were administered intravenously. A course of parenteral antibiotic was given with painkiller and antihistaminics. The animal was found completely normal just after three days of treatment.

KEYWORDS:Post-cervical uterine torsion, dystocia, buffalo.

**INTRODUCTION**

Torsion of the uterus is a common cause of dystocia in all domestic animals. It is defined as the revolution or twisting of the uterus on its longitudinal axis. This condition is more commonly observed in pluriparous than in primiparous animals (Roberts, 1982) and right sided uterine torsion is more common than left sided uterine torsion in buffaloes (Srinivas *et al*., 2007). In buffalo about 29.5 to 30.6% of dystocia are due to uterine torsion (Amer *et al.*, 2008). This condition was the most important cause of maternal dystocia in graded Murrah buffaloes with an incidence of 83.33% (Srinivas *et al.,* 2007). Successful management of torsion depends on the degree and duration of the torsion. A 90-180° torsion occur during last few months of gestation and becomes evident at the time of parturition while 180 - 360° uterine torsion is a severe condition often associated with obstruction of the blood supply to the uterus and finally death of the fetus (Noakes *et al*., 2009). Therefore, timely management of the problem is important to save the life of the fetus as well as the dam. Although dystocia is less common in buffalo than in cattle, the most frequent cause of maternal dystocia is uterine torsion (Srinivas *et al.,* 2007). The predisposing factor is anatomical in origin especially long uterine ligaments, low number of smooth muscle cells in the broad ligament and also due to the confinement of the animal (Ahmad, 2001, Noakes *et* *al*., 2009). The right sided uterine torsion found in the present case is in agreement with the earlier reports (Srinivasan *et al*., 2007; Das *et al.*, 2010; Mudasir *et* *al*., 2010). Prasad *et al*. reported 56.88% cases of dystocia occurred due to uterine torsion in buffaloes and among that 87.09% was right sided and 12.90% was left sided uterine torsion. Most cases of uterine torsion occur at the time of parturition or during the last month of pregnancy. The cervix could not be reached per-vaginum because of the post cervical uterine torsion in the present case. After detorsion of the uterus through Schaffer's method, fetus could be palpated through the dilated cervix. Death of the fetus in the present case may be due to the delay in consultation to clinic, resulting in lack of blood supply to the uterus due to torsion and subsequent hypoxia (Noakes *et al*., 2009). A modification of the rolling technique called Schaffer’s method, has been described by Arthur ( Arthur *et al.,* 1966) and recommended widely (Sane *et al*., 1982) for detorsion of uterus in cows and buffaloes. Rolling the dam is considered an adequate treatment for uterine torsion. Schaffer’s method is described as requiring less assistance, technically easier, less stressful, and a faster way to correct torsions than other methods of correction of uterine torsion ( Roberts *et al*., 1973). The direction of the torsion is first determined. The animal is then laid on the same side as the direction of the torsion. For instance, it is laid on the left side for counterclockwise or left side torsion. The Schaffer’s method utilizes ropes to rotate the animal, where the forelegs are tied and the extended hindlimbs are tied at the location of the pastern. An extra 3-4 meters of rope are left with which to roll the animal. A plank, the ideal length described as 3 to 4 meters long and 20 to 25 cm wide, is placed with one end on the upper abdomen of the buffalo with the other end still on the ground. A suggested weight of 75-100kg is placed on the center of the plank. The animal is slowly pulled on its back to the opposite side of the torsion. The mechanics for this involves increased intra-abdominal pressure to the upper flank moving from the ventral abdomen and eventually to the other side as the animal is rolled. This allows the uterus to be held in place as the body of the animal is rolled around it. Rolling may be repeated if not correct the initial attempt. This method has been recognized to correct torsions ranging from 90˚ to 360˚( Roberts *et al*., 1973) . Schaffers method has been reported to be successful in 34% to 100% of cases (Kruse *et al*., 2004).

**CASE REPORT**

A pluriparous full term pregnant buffalo at its four parity was presented to veterinary hospital in Namakkal Veterinary College, India, with history of restlessness, anorexia and excessive straining with no progress in parturition from the last 12-24 hours. On clinical examination serosanguinous discharge through oedematous vulva was evident. Per-vaginal examination revealed twisting of vaginal folds towards right (Fig-1.A).Through rectal and per-vaginal examination the case was diagnosed as right sided (180°) post- cervical uterine torsion (Fig-1.B). The Post cervical uterine torsion in the present case is in agreement with the report of Deori *et al.* (2009) in a non-descript buffalo. Rectal palpation was reaveled that the fetus was dead, however, the dam may survive if torsion correct immediately. To correct uterine torsion non surgical modified Schaffer's method was chosen to avoid surgical intervention Rolling the dam through the Schaffer s method has proved very useful for the replacement of uterine torsion in the buffalo (Noakes *et al*., 2009) and similar observation was evident in the present case. The animal was casted in the right lateral recumbency with forelimb and hind limb tied separately (Fig-1.C). A wooden plank was placed over the abdomen. One person was asked to stand over the plank (Fig-1.D). The animal was rolled in a quick jerk in the same side of torsion and the person over the plank was asked to move over the plank at the same direction of rotation, so that the gravid twisted uterus remains static and the animal moves. The animal was examined per vagina after each roll to find out whether an effective detorsion had occurred or not. After two successive rolling sudden gush of uterine fluid was noticed through the vulva and complete detorsion was confirmed through pervaginal examination (Fig-1.E). The fetus could be palpated through the dilated cervix. The fetus was in the normal anterior longitudinal presentation with slight lateral deviation of head and neck. The postural defects were corrected through standard mutation technique. Forelimbs were tied over the fetlock joint with the help of snare and a dead fetus was delivered with the help of forced traction (Fig-1.F).



**Figure-1**: **A**.Twisted Vulva of affected animal. **B**.Per-vaginal examination before correction of uterine torsion. **C**. Casting of animal in the right lateral recumbency. **D**.Correction of uterine torsion by “Modified Schaffer's method”. **E**. Per-vaginal examination after correction of uterine torsion. **F**. Relieving of dead fetus by forced traction.

Following delivery four Steclin boli (Tetracyclin 500mg) intrauterine, two in each uterine horn were introduced. The placenta dropped normally within four hours after the manipulative

Following delivery four Steclin boli (Tetracyclin 500mg) intrauterine, two in each uterine horn were introduced. The placenta dropped normally within four hours after the manipulative delivery of the fetus. Five Litre of 5% DNS and 450 ml Mifex were administered through IV to the animal. Acourse of parenteral antibiotic was given with Intamox 4g (Amoxycillin+Cloxacillin) IM once daily for 5 days. Melonex (Meloxicam) 15 ml and Avil (Pheneramine maleate) 15 ml I/M for 3 days were also administered. The animal was found completely normal just after 3 days of treatment.

**CONCLUSION**

Reassessment of various speculations made for justifying the higher incidence of uterine torsion of buffaloes in comparison to other species has produced some realistic explanations. Small quantity of fetal fluids and associated decrease in size of uterus at the end of pregnancy seems to be a realistic justification for the occurrence of uterine torsion. Destabilizing factors such as weak broad ligament musculature, lower tone of uterine muscles along with sudden movements of dam and fetus can further add up to increase the probability of occurrence for uterine torsion . Modified Schaffer’s method was successfully used to correct the uterine torsion without any successive complication. The recovery of animal was occured within three days of treatment maintaining the normal feed habit with milk production.

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**ACKNOWLEDGEMENT**

All praises are due to **Almighty God** who enabled the author to complete this work successfully. The author expresses his sincere gratitude, heartfelt respect and immense indebtedness to his supervisor **Dr. Bibek Chandra sutradhar,** Associate Professor, Department of Medicine & Surgery, Chittagong Veterinary and Animal Sciences University for his guidance, valuable suggestions, inspiration and involvement.

The author would like to express his deep sense of gratitude and greatfullness to **Dr. Bhajan Chandra Das** (Director of SAQTVH) and internship coordinator **Dr. Bibek Chandra Sutradhar** (Directore, External Affairs), Chittagong Veterinary and Animal Sciences University for their constant inspiration and valuable suggestion for completion of the report work.

Finally, it is my pleasure to express big thanks to University authority, my parents, all of my well wishers, roommates, close friends for their encouragement and inspiration during my study period and preparation of this reportatthis level.

**The Author**

**March, 2014**