

Short Communication

Comparison between rolling and surgical treatment of uterine torsion in buffaloes (*Bubalis bubalis*) in Basrah province

Abd-Albari A. Alfaris*, Taher A. Fahad and Baqer J. Hassan

Department of Internal, Preventive Medicine, Surgery and Obstetrics, College of Veterinary Medicine, University of Basra Basra, Iraq.

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A number of 30 buffaloes with uterine torsion were described in a period of 2010 to 2011 in our clinic in Basrah Province Alnashwa. All animals were treated first by rolling but only four cases responded and were corrected by this method, 86.67% of cases were corrected by caesarian section (CS). We found that the right uterine torsion was more incidence 73.33% than left uterine torsion, from the result, we found 4 cases of uterine torsion with malpresentation. The fetus survivability after caesarian section was only 46.51%. The study concluded that caesarian operation in early diagnosed uterine torsion in buffaloes is the best method for saving the fetal and maternal life in case of rolling failure.

Key words: Buffaloes, Basrah Province, uterine torsion

INTRODUCTION

The uterine torsion is one of the most important causes of dystocia which occur in most cases in the last 60 day of gestation. Uterine torsion is defined as a rotation of pregnant uterus around its longitudinal axis. It is divided into right or left according to direction, mild, moderate or severe according to degree and pre-cervical, cervical or post-cervical according to position (Amer and Hashem, 2008). The torsion is usually located between 45 to 180 degree but in some cases, torsion up to 720 degree has also been reported. The exact mechanism and etiology of torsion is unknown. It has been noted to occur in the presence of intra-abdominal adhesion, ovarian tumors and abnormal presentation of fetus (Cook and Jenkin, 2005).

Caesarian operation is one of the most common surgical procedure performed by veterinarians and is considered as a routine obstetrical technique (Amer et al.,

2008). It has a high maternal and fetal surviving rate. The advantages of caesarian operation in uterine torsion are to save maternal and fetal life and maintainance of fertility (Vermunt, 2008). The operation should be performed immediately in the failure of expulsion of fetus few hours after the signs of first stage of labor begin (Krishnakumar et al., 2008)

MATERIALS AND METHODS

A number of 30 buffaloes having uterine torsion were described in the period between 2010 and 2011 in our clinic in Basrah Province. The diagnosis of uterine torsion was done by history, clinical examination, rectal and vaginal palpation. The clinical signs include the animals isolating themselves from others in the group and showing signs of first stage labor but the fetal membranes do not appear at the valve, vaginal lumen was typically dry, lacking mucus

*Corresponding author. E-mail: alfars@yahoo.com, Baqer.hikma.iq@gmail.com

according to the degree of torsion. As the hand passed into the vagina or the rectum, there was a distinct twist which can be either clockwise or anti-clockwise (Beardon and Fuquay, 1997).

The animal was treated first by rolling by using of wooden bar; surgical treatment was made in case of rolling failure. 86.67% of animals did not respond to rolling, the caesarian sections were made on these animals. The operative site was prepared for aseptic surgery and left ventrolateral side laparotomy performed under the local infiltration (Amer et al., 2008) after removal of fetal and decomposed mass. The uterus was exposed as much as possible and cleaned with diluted povidone iodine solution and all fluid accumulated in the uterus was siphoned out. The cut edges of uterus were inverted with cushioning sutures using No.3 chromic catgut, the abdominal skin incision were closed by routine standard procedure and it should be followed up for at least one week to know the result of caesarian section (CS) on delivered animals (Krishnakumar et al., 2008).

RESULTS AND DISCUSSION

In the recent study, uterine torsion can be diagnosed by rectal or vaginal palpation; with clinical signs of abdominal pain, the animal was uncomfortable, arching of the back, straining, and some time kicking of the abdomen, the valve and vaginal lumen were dry and did not contain mucus. This result was in agreement with Beardon and Fuquay (1997) who reported the same clinical signs associated with uterine torsion. Rectal palpation was another important route for diagnoses of uterine torsion. The uterus was felt to be turned to the right or left direction (Aubery et al., 2008; Cebra et al., 1997). In this study, we found that the right side uterine torsion was of more than 100 degree incidence (73.33%) than the left side uterine torsion. This result was in agreement with Moore and Richardson (1995). This may be due to the location of rumen into the left side of abdomen that prevents left uterine torsion. In this study 4 animals showed uterine torsion with abnormal fetal presentation appearing during caesarian operation, this may give indications of the abnormal presentation of fetus which caused uterine torsion. This result was in agreement with Sutter et al. (2003), Riggs (2006) and kovavisarach and Vanitchanono (1999) who reported that malpresentation of fetus may cause uterine torsion. In this study, the fetal survival was little (12 fetuses), this may be due to the late diagnosis of uterine torsion, so the early diagnosis of uterine torsion increased the maternal and fetal survival rate. The result is in agreement with Wheat and Meaghor (1972), Nigel et al. (1992) and Srinvas et al. (2007) who reported that the early diagnosis of uterine torsion saved the fetal and maternal life and maintained fertility. The other 14 fetuses died after operation due to emphysema because of introduction of bacteria to the uterus which invaded the dead fetus.

CONCLUSION

Caesarian operation in early diagnosed uterine torsion in buffaloes is the best method for saving fetal and maternal life.

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