Genital Prolaps Fixation in Buffalo

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Abstract: Prolapse of the vagina and cervix is a disorder of ruminants normally in late gestation. Different methods used for prolapsed vagia treatment that Winkler’s cervix fixation is one of them. In this procedure to prevent displacement of the cervix caudally, anchoring it by using nonabsorbable sutures or nylon tape to the prepubic tendon or the sacrosciatic ligaments. Although the technique as being done under caudal epidural anesthesia. A cutting U form needle (10 cm) applied for sutures of cervix. In this study, 10 buffalo with vaginal prolaps treated with Winkler’s method. After one week of surgery, health status of all animals was good and suitable adhesion formed at the suture place. In conclusion, cervicopexy is the difficult procedure that has good result in vaginal prolapse treatment.

Key words: Buffalo, cervicopexy, cervix, vaginal prolaps

INTRODUCTION

The calving related reproductive disorders around or following parturition have negative influence on the productive and reproductive performance of the buffalo (El-Wishy, 2007). Among the disorders before calving, vaginal prolapse is one of the main problems caused heavy economic losses to livestock (Khan et al., 1984). It is a common obstetrical problem, which negatively affects the postpartum estrus, conception rate and calving interval of buffaloes (Jaffery and Edward, 1988). Between the reproductive disorders, the highest incidence of genital prolapse followed by retention of fetal membranes and dystocia (42.9, 23.2, 20.7%, respectively) in the river buffaloes (Samad et al., 1987). Sheth (1970) studied 6354 animals that were treated for various reproductive disorders in Surti buffaloes and among the cases of prolapse, 50.5% were that of postpartum prolapse whereas the remaining 49.5% were that of prepartum vaginal prolapsed.

Tomar and Tripathy (1994) reported that the incidence of prolapse, retention of fetal membranes and metritis in 452 primiparous and multiparous buffaloes was 3.2, 6.6 and 3.6%, respectively. In this study, incidence of prolapse was significantly high in the first two parity buffaloes compared to other parities. In buffaloes kept under semi stall feeding system, the occurrence of genital prolapse was higher compared to those maintained under stall feeding (14.07% vs. 12.98%) (Bhatti et al., 2006).

Some predisposing factors considered to be contributing to this disorder such as elevated steroid concentration, deficiency of serum minerals and faulty management conditions (Seitaridis and Papadopoulos, 1978). Cervicopexy is one of the techniques used for the treatment of vaginal prolapsed.

In this method, external cervical opening is sutured to the prepubic tendon. The main advantage of this approach is the reduction of postoperative treatments. The manner are performed in which animals that external maintenance procedures of prolapse were not successful. In this method, straining after surgery minimized or completely disappears. In this approach, when the umbilical tape is used, peritonitis occurred. Therefore the use of sutures with low capillary properties is recommended.

MATERIALS AND METHODS

Experimental area: Iran is a country with a continental subtropical climate. It is located between latitude 25.3° and 39.47°N and longitude 44.5° and 63.18°E. The present study was conducted on Murrah buffaloes in district Mayan. The district Mayan is located between latitude 38.5°N, longitude 46.7°E.

Surgical procedure: On spring, 2011, cervicopexy was carefully done in ten buffalo, which had vaginal prolapse. Epidural anesthesia was achieved with 8 mL of 2% lidocain hydrochloride (Lorocaine). The prolapsed mass was washed clean, dressed with povidone iodine solution and replaced. The replaced cervix was retained by the Winkler’s technique (Winkler, 1966). In this approach a half-circular needle, cutting 8.0 cm in length, which is U shaped and single-stranded non-absorbable suture material such as nylon and or polymerized caprolactam
reproductive disorders after repeat breeding and abortion that vaginal prolaps was the third most common 14.29% were even obese (Mishra et al., 1997). He data of 63 cases of genital prolapse in third of gestation (Arthur et al., 1989) reported that vagina prolapse occurred from June to September with highest incidence (23.07%) during August. Study of Ahmed et al. (2005) demonstrated that prolapsed buffaloes had significantly low serum concentrations of Ca (6.42±1.05 vs. 10.96 ±0.95 mg/dL), P (2.90±0.85 vs. 5.50±1.61 mg/dL) and Mg (1.50±0.53 vs. 2.40±0.53mg/dL) compared with the controls. It was indicated that low levels of these minerals might be involved with the incidence of genital prolapse in these animals. In another study was observed, pregnant buffaloes suffering with vaginal prolapsed had lower serum calcium concentration compared to healthy pregnant buffaloes (Akhtar et al., 2008). This finding was similar to findings of Mandal et al. (2002).

Other factors that predisposed buffaloes to genital prolapse are include repeated parturitions, excessive relaxation of pelvic ligaments due to debility, old age, congenital weakness of ligaments, high levels of estrogen (Roberts, 1986). Cervical fixation is a method for treatment and prevent vaginal prolapse in cattle. Although this method has advantages and is a good prognosis, but due to surgeon’s mistake or if less experienced surgeon, urethera or bladder perforated with suture or take the consequences may be severe. Also make perforation of pelvic vessels may cause severe and uncontrollable hemorrhage. If this procedure is carefully performed, the prognosis was very good, and prolapse will not re-create. In addition, there would be no deleterious effects on fertility (Turner, 1989).

CONCLUSION

As mentioned above, The vaginal prolapse is one of the common reproductive diseases in ruminants. Early treatment of the complication can prevent the high economic losses and and reproductive efficiency of animals will be well. Fixation of the prolapsed tissue to the prepubic tendon, caused good improvement of animal and they didn’t need to the high supportive treatments. This treatment did not create adverse effect on animal reproduction.

REFERENCES


