PROTRUSION OF GENITALIA THROUGH VAGINAL TEAR IN A BUFFALO

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ABSTRACT

The present communication deals with the management of an unusual protrusion of post-partum involuting internal *genitalia* through a left dorso-lateral vaginal tear in a recently calved Mehsana buffalo.

KEYWORDS: Protrusion, Prolapse, Vaginal tear, Post-partum, Buffalo.

INTRODUCTION

Cervico-vaginal and uterine prolapse are commonly encountered accidents in all domestic animals (Noakes *et al.*, 2001, Sah and Nakao, 2003). It usually involves protrusion of the portion of floor, lateral walls and roof of the vagina through vulva along with the cervix and uterus moving caudally or exposure of both (Roberts, 1971). Faulty obstetrical procedure to handle a case of dystocia or prolapse may cause spontaneous rupture of either vagina or uterus which may lead to herniation or protrusion of various abdominal visceral organs through tear. Various researchers have reported the protrusion of visceral organs; bladder and gravid uterus (Noakes *et al.*, 2001), ovaries (Ghuman *et al.*, 2010), intestine and uterus (Veeraiah and Srinivas, 2010) through vaginal tear in ruminants.

CASE HISTORY AND OBSERVATIONS

A four years old primiparous Mehsana buffalo was brought to clinics with a history of prolapse of *genitalia* after an assisted delivery four days back. Buffalo had recurrent cervico-vaginal prolapse during last 3 days subsequent to assisted delivery and every time unsuccessful attempts were made to manage the same at field level. Reoccurrences might be due to faulty handling or improper repositioning of the prolapsed mass which increased in size at successive attempts before arrival to clinical complex.

On gynaeco-clinical examination, the buffalo had severe intermittent tenesmus, relaxed pelvic ligament and protrusion of prolapsed mass through vulvar lips. A basket ball sized protruded mass with outer serosal layer of gravid and non-gravid involuting uterus (vaginal hysterocele), fallopian tubes and ovaries with stretched broad ligaments were the salient clinical features. The mass was soiled, inflamed, congested and had abrasions on serosal surface and mucus membrane. Beneath this protruded mass, the cervico-vaginal prolapse and dorso-lateral tear on the vagina could be identified (Fig. 1). Through the vaginal tear, internal *genitalia* protruded out with a kink at uterine body. Cervix was moderately firm in consistency and about two finger dilation with clear turbid uterine discharge.

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TREATMENT AND DISCUSSION

The buffalo was restrained in right lateral recumbency under epidural anaesthesia using 4 ml of 2% lignocaine hydrochloride solution. After through clearing and lubrication of the protruded internal genitelia, the involuting uterus and related organs were replaced through the previously existing vaginal tear. This was followed by replacement of the cervico-vaginal prolapse to its normal position and the vaginal tear was opposed by continuous sutures using chromic catgut No: 2. A modified buhner«s vulval suture was applied for retention along with a rope truss. The buffalo was administered intravenous fluid, calcium borogluconate and supportives.

Abdominal straining gradually declined within two days and animal had uneventful recovery within five days after removal of the Buhner«s suture and rope truss. In the bovines, several authors reported that the rupture of birth canal in dystocia can be due to fetal causes like long extremities, mal-disposition, sharp bony prominence, emphysema, over size etc. or maternal causes like spontaneous uterine rupture, uterine torsion, feto-pelvis disproportion, narrow birth canal, weak traumatized vaginal wall etc. (Robert, 1971; Pearson and Denny 1975; Dhaliwal *et al.*, 1991 and Veeraiah and Srinivas, 2010). Spontaneous rupture of the vaginal wall was reported by several authors in different animals (Dhaliwal *et al.*, 1991; Veeraiah and Srinivas, 2010). The various site of vaginal tear have been reported with different size in dorso lateral, roof and floor of vagina along with protrusion of various visceral organs (Siddiquee, 1992; Dharani *et al.*, 2010; Veeraiah and Srinivas, 2010) and uterine prolapse (Andres, 1971). Hypovolemic shock and even death can occur if the uterine artery or broad ligament is ruptured and if the ensuing hemorrhage is not adequately controlled (Zolhavarieh *et al.*, 2009). Additionally, as the duration of the prolapse increases vascular compromise, trauma and fecal contamination may result in an increased uptake of toxins via the vaginal mucosa.

In the present case protrusion of involuting uterine horns, ovaries fallopian tubes and broad ligament through a tear might have occurred due to faulty handling of the recurrent vagino-cervical prolapse with severe tenesmus in the initial stage before and after parturition or the vaginal tear might have occurred during successive handing of dystocia and protrusion become more severe in size during the handling of cervico-vaginal prolapse.

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FIG 1: CERVICO-VAGINAL PROLAPSE AND UTERINE PROTRUSION THROUGH THE TEAR