Short Communication

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Dystocia Due to Ringwomb in Corriedale Ewe at an Organized Farm in Kashmir

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ABSTRACT

The present case report explains a case of dystocia due to Ringwomb in a Corriedale ewe and its successful management at an organized sheep and goat farm in Kashmir valley. The animal had history of recurrent vaginal prolapse and was managed with standard treatment including applying Buhner's sutures. One month later the animal started showing signs of lambing and straining but was unable to expel the fetus. On per vaginal examination the cervix was minimally dilated with only three fingers able to pass and the head of the fetus was near the internal os of cervix. The animal was treated with single shot of Dexamethasone (2ml) and Inj. Epidosin (3ml) q.6.h. On next day cervix was fully dilated and the fetal head was palpated. The emphysema had already set in, that made the extraction difficult. However, following mutation the male lamb was delivered by partial traction. The ewe was treated with antibiotics, anti-inflammatory drugs, antihistaminic, intrauterine antibiotics and IV fluids. The ewe had an uneventful recovery thereafter.

Keywords: Ewe, Kashmir, Organized farm, Ringwomb

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INTRODUCTION:

The term 'ringwomb' is defined as the condition when the cervix does not dilate fully during parturition. There are varying levels of incompleteness in dilatation, ranging from total closure to a state where the birth canal is significantly smaller due to the presence of a tiny frill of cervical tissue (Praveen and Naidu, 2015). Dystocia in ewes primarily results from ringwomb or the cervix failing to dilate during parturition (Upasana *et al.,* 2019). There are several potential causes of dystocia in sheep, such as poor maternal pelvic conformation, enlarged fetus, malpresentation of the lamb, uterine inertia in polytocous ewes, vaginal prolapse, ringwomb, uterine torsion, and ectopic pregnancy (Brozos *et al.,* 2012). The etiology behind incomplete dilation of cervix could be insufficient release of hormones involved in softening of collagen. Cervical ripening is a multifactorial process which is an outcome of hormonal regulation, inflammatory process and enzymatic breakdown of collagen (Dutt *et al.*, 2018). This condition usually occurs in ewes older than three years (multiparous) and sometimes with polytocous pregnancies (Parkinson *et al.,* 2019; Cowley *et al.*, 2023). Ring womb occurs without a specific cause. Multiple and different causes can lead to

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this condition. Although the precise cause of ring womb in the ewes is not clear, but a significant percentage of this condition occurs along with vaginal prolapse (Mostefai *et al*., 2018).

CASE HISTORY AND OBSERVATIONS

Five years old Corriedale ewe present at Mountain Research Centre Sheep and Goat, F. V. Sc. & A. H, SKUAST-Kashmir with a history of vaginal prolapse one month back. The prolapse condition was managed by reduction, reposition followed by retention with Buhner's technique using non absorbable suture material. One month later the animal started showing signs of straining and labour but was unable to expel the fetus.

TREATMENT AND DISCUSSION

On per vaginal examination, there was incomplete cervical dilatation with one hand passing. The animal was treated with shot of Dexamethasone 2ml I/M Stat, Inj. Epidosin 2ml I/M 6.q.h. and inj Mifex 10ml S/C Stat. Animal was examined frequently till next day. On next day, cervix was 3 finger dilated and the emphysematous fetal head was located. Both the forelimbs of fetus were brought to the pelvic outlet by mutations. The snare was applied on both the forelimbs and traction was applied. Since both the limbs got detached from the fetal body due to tissue putrification, the traction was made on the fetal head which also got teared from the neck of fetus. The fetal neck was cupped with full hand and the whole fetus was delivered with mild traction (Fig A, B). After removal of all fetal parts, the animal was treated with inj Intacef @ 500 mg OD, inj Megludyne @ 2ml I/M, and inj Avil-vet @ 2 ml I/M for 3 days. The intrauterine antibiotics and IV fluids were also administered. Cervical dilatation, which happens right before parturition, is essential for a healthy vaginal birth of newborn. Problems with fetal delivery arise from failure of cervical dilatation caused by changes in the cervical ripening system or insufficient uterine contraction (Kumari and Dutt, 2020). Studies have shown that the development of the ringwomb may be influenced by the rising ratio of estrogen to progesterone after parturition (Mavrogianni, 2017). Although the precise cause of the illness is unknown, there are a number of risk factors, including mineral or hormone imbalances, hypophosphatemia, hypoglycemia and hypocalcaemia (Sharun and Erdogan, 2019). However, in the present case the cause of ringwomb could not be determined.

Fig. A: Ewe treated for cervical dilatation followed by traction **B:** Decapitated emphysematous fetus delivered by mild traction

CONCLUSION

In conclusion, Ringwomb condition was treated with cervical dilator followed by successful per-vaginal delivery of fetus by mild traction.

CONFLICT OF INTEREST

None

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