

INCOMPLETE CERVICAL DILATATION WITH UTERINE ADHESION AND ITS SURGICAL MANAGEMENT IN A NON-DESCRIPT DOE

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ABSTRACT

A case of dystocia due to incomplete cervical dilation consequent to uterine adhesion in non-descript doe and its surgical management was reported in this paper.

Keywords: Incomplete cervical dilatation, Uterine adhesion, Doe

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INDRODUCTION

Incomplete cervical dilatation (ICD) refers to the sub-optimal dilation of the cervix during parturition, hindering the unassisted delivery of the fetus. This condition is often associated with a narrow pelvis, ineffective straining, and can eventually lead to uterine inertia and dystocia (Noakes, 2001). Among small ruminants, the failure of cervical dilatation, commonly known as “ring womb,” stands out as the leading maternal cause of dystocia (Ghosh *et al.*,

1992; Bhattacharya *et al.*, 2015). Caesarean section is one of the best methods to save both dam and young one during emergency situations. The survival rate of kids and does by caesarean section was reported as 90 per cent. The caesarean section is becoming the safest, easiest and most reliable procedure in goats. This report highlights the significance of recognizing and effectively addressing ICD in small ruminants to ensure optimal maternal and fetal health during parturition.

CASE HISTORY AND OBSERVATION

A five-year-old full-term pregnant non-descript goat was presented to Large Animal Obstetrical unit of Veterinary Clinical Complex, VCRI Salem, with the history of restlessness, inappetence, dark brownish vaginal discharge and showing continuous straining since previous day

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evening. On clinical examination, the animal was dull and depressed. All other vital parameters were within the normal range. Vaginal examination revealed one finger dilatation of cervix. On ultrasound examination, the fetal fluid and placentomes were visualised. Fetal movement and heart beat were absent. Based on clinical, ultrasound and radiological examination, the case was diagnosed as dystocia due to improper cervical dilatation. Hence, it was decided to induce parturition with luteolytic agent PGF₂α (125 µg, i/m) along with intravenous fluid, antibiotic-ceftriaxone, and antihistamine chlorpheniramine maleate. The animal was examined per-vaginally every 24 hrs interval, but there was no progress in cervical dilatation even after 72 hrs. Hence, it was decided to perform C-Section to deliver the fetus.

TREATMENT AND DISCUSSION

Caesarean section was performed in left ventro-lateral (Oblique) approach. Upon incision of all abdominal muscles and peritoneum it was found that the uterus was having severe colour changes in both gravid and non-gravid uterine horns (Fig.1). Further more, both horns were adhered over abdominal muscle, omentum and internal organs. The gravid horn was incised and a dead female fetus was relieved through uterine incision. Since the uterus was adhered with abdominal muscle and other organs, it was not able to exteriorize the uterus from abdominal cavity. After clearing

the adhesion around the incised area, the uterus was closed by using PGA 1.0 with Cushing followed by Lembert suture pattern. Post operatively the animal was treated with antibiotic, anti-inflammatory and antihistamine for 7 more days. Animal recovered uneventfully (Fig.2).

Incomplete cervical dilatation at the time of parturition is more common in small ruminants than other farm animals (Roberts, 1971). Failure of cervical dilatation is due to number of causes i.e. cervical induration, primary uterine and cervical inertia, and secondary uterine inertia with cervical involution and in the early stages of normal parturition (Shivika Chouksey *et al.*, 2022). Incomplete cervical dilatation is more likely to be due to hormonal dysfunction which normally causes the cervix to ripen, or it is a failure of cervical tissue to respond (Noakes *et al.*, 2001). Caesarean section is indicated if it does not respond to medical treatment with hormones and drugs and successful surgical management of incomplete cervical dilatation in goat was reported by Monica *et al.* (2018).

In the present case, uterine adhesion was the main reason for dystocia which lead to the imperfect dilation of the cervix, even though the animal had completed the full term. A similar case of uterine adhesion causing dystocia in a doe was reported by Sharun Khan *et al.* (2018). It is concluded that the dystocia might be promptly attended and proper diagnosis is essential to save the dam as well as fetus.



Fig. 1 Adhesion of uterus with abdominal muscles



Fig. 2 The goat after recovery

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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