SUCCESSFUL MANAGEMENT OF DYSTOCIA DUE TO FETOPELVIC DISPROPORTION BY C-SECTION IN A NON-DESCRIPT DOE

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ABSTRACT

A one-year old full-term female non-descript doe with abdominal straining for several hours past night was brought to Large Animal Obstetrics Unit of Madras Veterinary College Teaching Hospital for obstetrical evaluation. On physical examination, vital parameters were in normal range. Fetal forelimbs were protruding through vulval lips. Vaginal examination revealed congested vaginal mucous membrane with fully relaxed cervix and obstruction of fetal head in pelvic inlet. X-Ray confirmed the presence of single fetus in anterior presentation, dorso sacral position and extended forelimbs with obstruction of head in the pelvic inlet and the fetus was viable on ultrasonography. Further, it was diagnosed as dystocia due to fetopelvic disproportion. Hence, the animal was immediately subjected for caesarean section using inverted L-Block with 2% Lignocaine. Left lower flank oblique approach of hysterotomy was performed and a live male kid was relieved. Incision sites were closed as per standard procedure using PGA 1 and skin was also sutured with Nylone. The postoperative antibiotics (Inj. Ceftriaxone @ 25 mg/Kg BW IV) and fluids (Inj. DNS @ 10 ml/Kg BW IV) were administered along with Inj. Chlorpheneramine maleate (1 mg/Kg BW IM) for five days. Inj. Oxytocin (10 I.U. IM) administered for two days which supported early uterine involution. The doe had uneventful recovery without complications.

Keywords: Dystocia, fetopelvic disproportion, doe, caesarean section

Introduction

The Incidence of dystocia in small ruminants is not uncommon. Particularly in goats, prevalence of dystocia is around 8.23% (Mehta et al., 2002). Numerous techniques had been described to relieve dystocia (Rahim and Arthur, 1982; Winter, 1999). Caesarian section is less frequently required in small ruminants compared to cattle, due to the lower frequency of feto-maternal disproportion as a cause of dystocia. Mal dispositions are the most common causes of dystocia in sheep and goats. The most common indication for caesarian in small ruminants is obstruction of the birth canal with either soft tissue or bone. However, in small ruminants, due to small diameter of pelvis and insufficient room for easy manipulations, most of dystocia are subjected to caesarean section immediately without reconsiderations. Hence, the case of management of dystocia due to fetopelvic disproportion by caesarean section is discussed.

Materials and methods

The caesarean section was performed in a one year old full term female non-descript doe brought to Large Animal Obstetrics Unit of Madras Veterinary College Teaching Hospital with the history of
abdominal straining for several hours past night. On physical examination, vital parameters were in normal range. Fetal forelimbs were protruding through vulval lips. Vaginal examination revealed congested vaginal mucous membrane with fully relaxed cervix and obstruction of fetal head in pelvic inlet. X-Ray confirmed the presence of single fetus in anterior presentation, dorso-sacral position and extended forelimbs with obstruction of head in the pelvic inlet and the fetus was viable on ultrasonography.

Further, it was diagnosed as dystocia due to fetopelvic disproportion. Hence, the animal was immediately subjected for caesarean section using inverted L-Block with 2% Lignocaine. Left lower flank oblique incision was made on skin followed by fascia, abdominal muscle layers (external oblique, internal oblique and transverse abdominal), peritoneum and finally the gravid horn of uterus. Fetal extremity (i.e., forelimb) is held firm and a careful incision is made over the uterus without damaging the caruncular region. A live male kid was relieved followed by gentle separation of placental membranes. Incision sites were closed as per standard procedure using PGA 1(Fig.1 and Fig.2) and skin was sutured using Nylon (Fig.3).

The postoperative antibiotics (Inj. Ceftriaxone @ 25 mg/Kg BW IV) and fluids (Inj. DNS @ 10 ml/Kg BW IV) were administered along with Inj. Chlorehphedrine maleate (1 mg/Kg BW IM) for five days. Inj.Oxytocin (10 I.U. IM) administered for two days which supported early uterine involution.

**Result and discussion**

![Fig. 1: Utrecht suture](image1)

![Fig. 2: Lock-stitch suture](image2)

![Fig. 3: Horizontal mattress suture](image3)

![Fig. 4 a](image4a)

![Fig. 4 b](image4b)

Animal recovered uneventfully and incision wound healing was progressive (Fig. 4 a and 4 b). This purely depends upon the clinical status of the animal during presentation. More number of dystocia during first delivery is probably due to the narrow pelvis of the dams because of breeding the animals at young age and/or poor management. Feto-pelvic disproportion has been reported as one of the main causes of dystocia in cattle (Dhali-
wal, 1979) and ewes (Brounts et al., 2004). In goats
small pelvic area is the major factor for fetopelvic
disproportion (Kene, 1991). In such cases, caes-
sarean is the sole treatment for the betterment of
both dam and fetus.

Summary:

Any case of dystocia when it is presented at
the earliest has maximum survivability rate of
both dam and the fetus. This particular case of
fetopelvic disproportion during first kidding was
successfully managed by caesarean section using
standard surgical protocol.

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