

Succesfull Management of Dystocia due to Foetal Anasarca in Holstein Friesian Crossbred Cows

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ABSTRACT

Fetalanasarca is a condition characterized by excessive accumulation of fluid in the tissue and body that causes subcutaneous edema of the foetus. Attempt to deliver the foetus by a practicing veterinarian, but it was futile and referred to TVCC. Per-vaginal examination revealed that the cervix was fully dilated and the foetus was in posterior longitudinal presentation (P1), Dorso-pubic position (P2) with both the hind limbs were extended into the vaginal passage and limbs look like a short stumpy legs, one of the right side hind limbs was broken at the level of hock joint (P3). No clear-cut demarcation of fetal body parts noticed. Traction on both the hind limbs of the foetus failed to deliver the foetus due to ruptured of fetal part along with over weight of the foetus. Hence, the case was diagnosed as fetal anomalies. Dystocia due to fetalanomalies along with ascites in a Holstein Friesian crossbred cow was successfully relieved by following a Caesarean section.

Keywords: Dystocia, fetalanasarca, Holstein Friesian and Caesarean.

Foetal anasarca with ascites is seen most commonly in cattle and may affect the sheep (Roberts, 1971). Fetalanasarca is a condition characterized by excessive accumulation of fluid in the tissue and body that causes subcutaneous edema of the foetus. It is mostly seen in cattle but may affect other species such as buffalo and sheep (Sloss and Dufty, 1980). Various congenital abnormalities affecting intrauterine foetus in farm animals have been reported (Arthur *et al.*, 1996). Rarely mild hydrops of the amnion and/or allantois and oedema of the placenta may result in fetalanasarca (Arthur *et al.*, 2001).

The condition is commonly associated with either infectious diseases or developmental defects of fetus. The present case reports delivery of anasarcafetus associated with ascites in HF cross bred cow.

History and Clinical Observations

A Holstein Friesian crossbred cow aged about three years was referred to the Teaching Veterinary Clinical Complex (TVCC), Veterinary College and Research Institute, Namakkal with a history of full term pregnant. Attempt to deliver the fetus by a practicing veterinarian, but it was futile and referred to TVCC. Per-vaginal examination revealed that the cervix was fully dilated and the fetus was in posterior longitudinal presentation (P1), Dorso-pubic position (P2) with both the hind limbs were extended into the vaginal passage and limbs look like a short stumpy legs, one of the right side hind limbs was broken at the level of hock joint (P3). No clear-cut demarcation of fetal body parts noticed. Traction on both the hind limbs of the fetus failed to deliver the fetus due to ruptured of fetal part along with over weight

of the foetus. Hence, the case was diagnosed as fetalanomalies.

TREATMENT AND DISCUSSION

Per vaginal examination revealed foetus in posterior longitudinal with dorso pubic position with right hind leg broken at level of hock joint noticed. Snare were introduced in both the hind legs and traction was applied (4 men), while applying traction the part of fetus was trying to goes off with that part. External length of vagina was 9 cm (from dorsal commissure to ventral commissure) (Fig.1).



Fig. 1

So we advice for Cesarean section. The Cesarean was carried out as per standard procedure; Local anaesthesia (2% lignocaine hydrochloride) was gave in the form of inverted “L” blocks at left lower oblique site. After skin and all abdominal muscle layers incision the uterus was unable to hold to out or near to incision site due to over weight of the foetus. Uterine incision was done as such normal anatomical position of

the uterus with in the abdomen cavity and the fetus was removed by using four men traction after apply the snare on both fore limbs. After removal of fetus, it revealed fetalanasarca (Fig. 2). The bodies were severely deformed due to severe diffuse subcutaneous oedema with multiple cysts of various sizes, filled with serohemorrhagic fluid (Fig. 3).

The incision site was close as per standard procedures, uterus was closed by no 2 catgut by cushion followed lambert, muscle layer was closed with no 2 catgut by ford interlocking suture pattern, and skin was closed by cross matters suture pattern by using cotton theard.

The dam was administered with Inj. 20% Dextrose 2 liters, Inj. Normal saline 2 liters, inj. Righer’s lactate 1 liters, inj. Calcium borogluconate 450 ml and Inj. Oxytocin 30 IU intravenously followed by Inj. Enrofloxacin 15 ml I/M, Inj. streptopenicillin 5 g Intra peritoneal, Inj. Meloxicam 15 ml I/M, Inj. Chlorphenaramine mealeate 10 mi I/M, Blous-Nurea 4 no intra uterine and the wound was treated with lorexane ointment TID/day after washed with normal saline. The fetal membranes were removed manually following the delivery of dead anomaly foetus, since the membranes were easily separable and the dam treated for 5 days with fluid along antibiotic therapy, the dam start to take feed after 2 day of post surgical period (Fig. 5). Skin suture was removed 10 days (Fig. 5). Dam recovered uneventfully (Fig. 6).



Fig. 2: Dorsal View



Fig. 2: Ventral View



Fig. 3: Ascetic Fluid

Fig. 3: Multiple cysts

Foetal anasarca is the result of a disturbance of fluid exchange and may be of placental origin. In mild cases the foetus may be delivered by traction. Multiple incisions into the oedematous parts of foetus to drain the liquid or the removal of limbs is recommended whenever traction failed (Roberts, 1971). In the present case Cesarean section was performed by the obstetrician since the condition was severe. In this case foetal anasarca was associated with ascites. The probable causes of foetal anasarca are hereditary predisposition due to autosomal recessive genes (Arthur *et al.*, 1996) especially affecting normal embryonic lymph node development (Tamizharasan *et al.*, 2008). Foetal anasarca with ascites observed in the foetus were similar to those described by Arthur *et al.* (1996) in an anasarca foetus of cattle.

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