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Management of Dystocia Due to Oversize Foetus through Fetotomy in a Crossbred Heifer

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Dystocia is defined as delayed or difficult calving, something requiring significant human assistance (Lombard *et al.*, 2007). The most common cause of dystocia in cattle is fetopelvic disproportion. This is most common in heifers when size of the fetus is normal but the maternal pelvis is not big enough, or the fetus is unusually large and cannot be delivered through a pelvic canal of normal size. Dystocia is significantly higher in first and second parity cows and buffalo, and that dystocia of fetal origin is common in cows (65.62%) but less frequent (40.17%) in buffalo (Purohit *et al.*, 2012). The present paper reports successful management of dystocia due to foetal oversize through fetotomy in a crossbred heifer.

History and Clinical Observations

A 2.5 year-old primiparous crossbred heifer having completed gestation and ruptured allantoic and amniotic sacs some 6-8 hrs before was presented from field at Teaching Veterinary Clinical Complex, AAU, Anand. Before presentation to the college obstetrical manipulations tried by the quack were

Detruncated fetus

Bisected fetal pelvis

futile. The animal was found exhausted and depressed due to severe abdominal straining and one of the forelimbs of fetus was protruding at the vulva.

Per-vaginal examination revealed a dead fetus in anterior longitudinal presentation, dorso-sacral position with unilateral knee flexion. The fetus was large in size compared to small maternal pelvis with forehead fixed at maternal pelvis. The case was diagnosed as dystocia due to relatively over sized fetus with unilateral knee flexion and engagement of forehead in pelvic brim. As the oversized fetus was already dead, strategy was planned to remove it by fetotomy.

Treatment and Discussion

Epidural anaesthesia was given to animal by using 5 ml, 2% lignocaine hydrochloride. As uterine cavity was dry, lubrication was done by liquid paraffin. Head of the fetus was large and space in the vagina was less for any manipulation, hence the fetal head was extracted by the applying the forced traction on the lower jaw with the help of calving rope. It was not possible to expel the complete fetus due to oversize of trunk. Fetus was therefore divided into two parts by detruncating and anterior part was expelled by traction. Still it was difficult to deliver hind part of fetus due to hip-lock condition, so finally bisection of pelvis was carried out by using wire saw and one by one both the hind limbs were removed (Roberts, 2004).

The animal was stabilized with fluid therapy comprising of Inj. DNS and Normal saline 2 liter each and Calcium borogluconate 450 ml i/v, and Inj. Enrofloxacin (Flobac SA, Intas Pharma) @ 5 mg/kg BW, Chlorpheniramine maleate (Anistamin, Intas Pharma) @ 10 ml and Meloxicam (Melonex, Intas Pharma) @ 0.5 mg/kg BW i/m. There were signs of improvement and returning to normalcy of animal within short time of treatment. Animal was discharged with the advice for continuing antibiotics and anti-inflammatory drugs along with fluid therapy for next three days locally.

Attempt to deliver such type of oversize fetus through fetotomy may be one of the best methods, especially if the fetus is already dead, as it avoids caesarean operation, requires little assistance, reduce chances of trauma or injury to the dam through use of excessive traction and is also economic to the farmer (Roberts, 2004).

In the present primiparous crossbred heifer also the protected dystocia caused by feto-pelvic disproportion was successfully managed through multiple fetotomy and supportive therapy.

Conflict of Interest: All authors declare no conflict of interest.

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