CLINICAL MANAGEMENT OF DYSTOCIA DUE TO HYDROCEPHALUS IN A CROSSBRED COW

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ABSTRACT

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Dystocia due to hydrocephalus in a crossbred cow and its clinical management has been reported.

Key words: Hydrocephalus, Dystocia, Caesarean section, Fetotomy

Hydrocephalus is a rare condition and is attributed to genetic defect of fetus caused by a lethal recessive autosomal gene. It is characterised by abnormal accumulation of cerebrospinal fluid within the brain (Balasubramanian *et al.*, 1997).

A crossbred cow aged about 4 years was presented to the Teaching Veterinary College Hospital, Veterinary College, Hassan with the history of rupture of the water bag 24 hours back and the case was handled by local quacks. The vaginal discharge was fetid. On vaginal examination, the emphysematous fetus was found in the birth passage in anterior presentation, dorsal sacral position with dog sitting posture with both forelimbs and hind limbs present at the vulva and the head of the fetus was found to be enlarged. The case was tentatively diagnosed as dystocia due to hydrocephalus. Mutation, forced extraction and fetotomy operations were tried but failed to deliver the fetus and hence it was decided to perform caesarean section.

Posterior epidural anaesthesia was administered with 7 ml of 2% lignocaine solution. The animal was restrained on the right lateral recumbency. Surgical site was prepared aseptically for ventral oblique incision parallel to base of the udder just above the milk vein. Local infiltration was made with 2% lignocaine all along the incision line. Ringer's lactate (3 liters) was administered intravenously throughout the surgical procedures. After incising the skin and abdominal muscles, the gravid uterus was exteriorized and the fetal limbs were grasped directly along with the intact uterus. A longitudinal incision was made on the uterine horn avoiding the placentomes. Traction was applied by holding the anterior limbs of the fetus but failed to relieve as the fetus was emphysematous with enlarged head. Further, the subcutaneous air was relieved by incising the skin in many places and partial fetotomy at neck region was performed to remove the enlarged head from the body of the fetus (Purohit *et al.*, 2006) and the fetal trunk with limbs was tracted out. The serosal layer of the uterus was washed thoroughly with normal saline to remove blood clots. The uterotomy wound was sutured with chromic catgut No. 2 using Cushing's followed by (Loren *et al.*, 2008) Lambert's suturing techniques. Oxytocin 30 IU was administered intramuscularly. The peritoneum and muscular layers were sutured with Vicryl No.2, using horizontal interrupted suturing technique. The subcutaneous layer was sutured with simple continuous sutures using chromic catgut No. 1 and the skin was sutured using Linex No.1. The surgical site was dressed with povidone iodine gauze with stay sutures. Post operatively, Streptopenicillin (Penicillin 20,000 IU/kg b wt & streptomycin 2.5g TD Intramuscular), vitamin B complex with liver extract (Belamyl 10 ml im), Meloxicam (15 ml im) and Ringer's lactate (2 liters iv) were administered daily for 5 days. The animal exhibited continuous improvement in feed and water intake from next day of surgery and the surgical wound eventually got healed. The skin sutures were removed on 10th day post operatively. The dam recovered uneventfully.

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