FOETAL HYDROCEPHALUS IN A JERSEY CROSSBRED COW:CASE REPORT

B.P. Shukla, S.K. Verma, A.S. Parihar and Shivendra Singh

Department of Veterinary Surgery and Radiology, College of Veterinary Science and Animal Husbandary Mhow. (M.P.)- 453446

Corresponding author : drvermaskvet@gmail.com

Bovine congenital anomalies are infrequent occurrence believed to be induced by various environmental and genetic factors. Various congenital anomalies like monsters (Fazili, 2012), meningocele (Purohit *et al.,* 2012), atresia ani (Purohit *et al*., 2006) *etc* are reported in bovines. Hydrocephalus is due to an abnormal accumulation of fluid in the cranial cavity. Internal hydrocephalus is due to excessive fluid in the ventricular system. External hydrocephalus is rare and due to excessive fluid between the brain and dura mater. Internal and External hydrocephalus may be combined (Roberts, 1971).

History and Clinical Examination

A pluriparous full term pregnant Jersey Crossbred cow was presented to the College of Veterinary Science and Animal Husbandary Mhow hospital with complaint of straining and pain since last night. The pelvic ligaments were relaxed but foetus was not delivered. The vulva was oedematous and amniotic bag had already been ruptured. As per vaginal examination revealed complete dilatation of the cervix. The foetus was in anterior presentation, dorso-sacral position and a big soft thin cartilaginous fluctuating doom like swelling appear in pelvic region that caused dystocia. It was diagnosed a case of the foetal hydrocephalus.

Fig. Incised large hydrocephalous showing brain.

Treatment and Discussion

Present case of hydrocephalus was commenced under posterior epidural anaesthesia with 2% lignocaine hydrochloride (Benesch, 1960). The enlarge forehead and pelvic region was lubricated with paraffin. The cartilaginous fluctuating doom like enlarged part was ruptured with B.P. blade and fluid was drained out. The enlarge part was grasped between the palm and pressed and expelled out. The skin incision of forehead of the foetus, revealed thinning of cranial nerves, underdeveloped brain and fluid accumulation in the cranium. Post-obstetrically, the dam was administered with intravenous Calcium magnesium borogluconate (450 ml (½ i/v and ½ s/c)), Ringer's lactate (2 lit.), Normal saline (2 lit.), Oxytocin (45 IU), streptopenicillin (2.5 g), chlorpheniramine maleate (10 ml i/m) for five days and meloxicam (10 ml i/m) for three days. The foetal membranes were shed six

hours after the expulsion of the foetus and then four furea bolus was placed into the uterus. The dam was recovered uneventfully.

Hydrocephalus is a lethal defect of genetic origin results from skeletal abnormalities. There are two type of hydrocephalus, the first is due to occlusion of one of the interventricular canals, resulting distension of the cerebral hemispheres and an increase in the size of the head. The second type is external involving fluid accumulation outside the brain in the subarachnoid spaces (Jubb and Kennedy, 1970). In the present case, the calf was in anterior presentation with thinning of cranial bones and there was no adhesion of the limbs. The foetus was delivered easily per vaginum.

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