

Dystocia in a buffalo due to a foetal monster accompanying hydrops amnii

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ABSTRACT

A case of dystocia due to a foetal monster with catlin mark accompanied by hydrops amnii in a buffalo and its delivery by caesarean section is being reported in this communication.

Key words: Caesarean section, dystocia, foetal monster, hydrops amnii

A variety of pre-parturient conditions may interfere with normal parturition and hydrops amnii is one such condition which is characterized by gradual enlargement and filling of abdominal cavity (William, 1997). It is associated with genetic or congenitally defective foetuses (Roberts, 1971). In the present case, dystocia due to uterine inertia as a consequence of hydrops amnii and foetal monster relieved by caesarean section has been reported.

A pluriparous buffalo in 7th parity and at full term was brought to the PAU Veterinary Clinics, Ludhiana with the history of dystocia. She was straining since the last 2 days. The pelvic ligaments were relaxed and let down of milk began the day before presentation. Water bags had ruptured few hours before presentation and there was escape of about 50 litres of thick, viscid fluid. The animal was treated by local veterinarian with Inj. Lutalyse and cervix dilated after 16 hr of injection but failed to deliver the fetus. Clinical examination revealed that the buffalo was under respiratory distress with oral breathing. The abdomen was sagging and abnormally enlarged bilaterally.

Per-vaginal examination under epidural anaesthesia (7 ml, Lignocaine-HCl -2 %) revealed that

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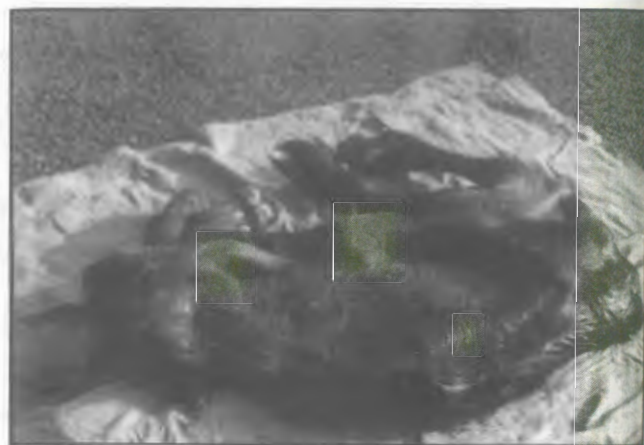


Fig1. Arthrogryposis fetus with defective skull bones and ankylosed joints

the uterus was located deep into the abdomen. Abnormally increased amount of amniotic fluid in the uterus was still palpable thus establishing the cause of enlarged abdomen as hydrops amnii. The foetus was dead and abnormally formed with ankylosed limbs. Careful palpation for the foetal formation and orientation after thorough lubrication of the genital passage with 2% Carboxy Methyl Cellulose Sodium Salt LR (S. D. Fine-Chem. Ltd., Mumbai, India) allowed to decide about surgical intervention. Hence, caesarean section was performed under local infiltration analgesia in right lateral recumbency. A foetal monster was delivered followed by evacuation of large volume of amniotic fluid. Though

the uterus was apparently healthy, separation of the endometrium from the underlying layers was noticed. The loosely attached placenta showing degenerative changes was removed before suturing the uterus. The operation was completed as per the standard procedure.

The animal was administered intravenous fluids (5 lits N.S.S.) during and after the surgery considering the possibility of hypovolemic shock from removing too much fluid too rapidly (Roberts, 1971). Postoperative antibiotic and supportive therapy was given with Inj. Streptopenicillin (2.5 gm, ip, 2.5 gm, im), Calcium borogluconate (450 ml, iv) Dexamethasone (5 ml, iv, Chlorphenaramine maleate (10 ml, im) and Vitamin B-Complex (10 ml, im) the following day of operation reduction in the size of abdomen was evident. The animal was kept under observation for the next three days and discharged.

Careful observation of the foetus revealed malformed skull with the head appearing rounded and dorsally compressed (Fig.1). There was defect in the frontal and occipital region showing lack of skin cover exposing the subcutaneous tissue for an area of about 10 cm diameter with an opening in the frontal bone (Catlin mark) (Roberts, 1971). There was a depression showing abnormal alignment in between the occipital bone and the atlas. All the forelimbs were ankylosed showing joint contractures (arthrogryposis).

Hydrops amnii is less common than the hydrops allantois (Roberts, 1971). This is most commonly seen in

the cattle (Noakes *et al.*, 2001). It develops slowly over several months during the later half of pregnancy. Often the condition is not recognized until parturition, when large quantities of syrupy, viscid amniotic fluid, occasionally containing meconium, is released (Roberts, 1971). Hydrops amnii is always seen in association with specific foetal abnormalities, especially the facial defects (Dhaliwal *et al.*, (1992), although this is not always the case (Sertich, *et al.*, 1994, Noakes *et al.*, 2001). In the defective foetus, swallowing is impaired leading to gradual increase in the amniotic fluid to 5-30 gallons compared to 1-2 gallons in normal cows (Roberts, 1971).

In the present case, dystocia due to a foetal monster accompanying hydrops amnii was successfully treated by caesarean section.

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