

## PROLONGED GESTATION IN A BUFFALO WITH HYDROAMNIOS ASSOCIATED WITH FETAL MONSTER: A CASE REPORT

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### ABSTRACT

A buffalo having prolonged gestation with hydroamnios associated with fetal head malformations was delivered per-vaginum after partial fetotomy.

**Keywords:** Buffalo, Hydroamnion, Fetotomy

### INTRODUCTION

Hydroamnios is a pathological condition of late pregnancy characterized by gradual but excessive accumulation of fluid in amniotic cavity (Jackson, 1995). It is frequently associated with congenitally defective fetus. The condition is most commonly seen in cattle (Noakes *et al.*, 2001) but may also be found in buffalo (Sathya *et al.*, 2006). In severe cases immediate termination of pregnancy is recommended through the use of drugs or caesarean section (Jackson, 1995). The present report describes a case of hydroamnios associated with fetal monster having malformation of the head and its successful delivery through partial fetotomy.

### CASE HISTORY AND OBSERVATION

A buffalo in third parity was presented to veterinary clinic, GADVASU, Ludhiana with the history of prolonged gestation by 10 days with no onset of parturitional symptoms. All the clinical parameters, viz., rectal temperature, heart rate and respiratory rate were within the normal range. The animal had an enlarged pear shaped abdomen. Pervaginal examination revealed soft cervix with one finger dilatation of external os and liquification of cervical seal. On rectal palpation, the uterus was enlarged and fluid filled but no fetal mass palpable.

### TREATMENT AND DISCUSSION

Since the buffalo had an overdue gestation with no onset of parturition symptoms, it was decided to induce parturition using Cloprostenol (Inj. Vetmate, 2 ml), Dexamethasone (Inj. Dexona, 10 ml) and Diethylstilbesterol (20 mg), intramuscularly. Following 8 hrs of treatment, animal started straining and both the water bags were ruptured releasing large quantity (approximately 50 litres) of amniotic fluid suggestive of hydroamnios. Per-vaginal examination revealed relaxed birth passage with a fully dilated cervix. Both the forelimbs were fully extended in the birth passage with left lateral deviation of head. No fetal reflexes were present. Following epidural anaesthesia (7ml, 2 % Lignocaine) and ample lubrication with sodium carboxy methyl cellulose gel (Carmellose-Na 1%, WDT, Garbsen, Germany), an attempt was made to correct the deviation of head but failed. Then the buffalo decision was subjected to perform partial fetotomy using Thygeson's fetotome loaded with the wire saw (Bovivet, Denmark) and left forelimb was amputated. Again, correction of head was tried but no success was achieved. Thereafter, head and neck were amputated and calf was delivered with moderate traction. The placenta was removed completely and the buffalo was discharged after 24 hrs with the routine prescription of antibiotics and supportive therapy.

Gross examination of the fetus revealed opening on the frontal region of the head, defective ossification and with lack of skin as well as subcutaneous tissue (Catlin mark, Figure). Catlin mark is a skull (cranium) ossification disorder leading to opening in the frontal region (Mupparapu *et al.*, 2006). The other malformations observed were cleft palate, lack of eye orbits (anophthalmia) and presence of one ear (unilateral anotia). Hydroamnios is caused by increased production or diminished disposal of amniotic fluid. After midgestation, the amount of amniotic fluid is regulated by fetal deglutition and any malformation preventing fetus from swallowing such as anencephaly, schistosoma and chondrodystrophy can lead to hydroamnios (Sloss and Dufty, 1980). Fetal head anomalies, viz., cleft palate and Catlin mark seen in the present case might have lead to impaired swallowing and thereby gradual increase of fluid in the amniotic cavity.



Figure : Catlin mark on the frontal head region of fetus delivered through partial fetotomy.

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- ☛ The General body approved the formation of New ISSAR Chapter named as RVC Chapter for army veterinarian Col (Dr.) Devendrakumar (09877891266) was nominated as co-ordinator of the chapter