

A TYPICAL CASE OF HYDRAMNIOS ACCOMPANIED WITH FETAL MONSTROSITY (PROGNATHISM) IN A NON DESCRIPT COW

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ABSTRACT

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A successful management of hydroamnions in full term local cattle and delivery of a live male calf with head monstrosity through obstetrical mutation and forced traction is reported.

Key words: Hydramnios, fetal monstrosity, cow.

INTRODUCTION

Hydramnios or hydrops of amnion is characterized by a gradual enlargement or filling of the amniotic cavity that is associated with a genetic or congenitally defective fetus. The condition is seen most commonly in cattle, occasionally in sheep and rarely in pigs and carnivores (Roberts, 2004, Noakes *et al.*, 2009). Fetal abnormalities that causes this defect includes bulldog calves (Dexter cattle), brachygnathic calves, muscle contracture monsters, pituitary hypoplasia/aplasia, and hydrocephalic calves. The present communication reports a typical case of hydramnios accompanied by fetal monstrosity in a non descript cow.

CASE HISTORY AND OBSERVATIONS

A local non descript pluriparous cow aged about 5 years and weighing 200 kg in her advanced pregnancy was presented at Referral Veterinary Hospital cum Clinical Complex, Faculty of Veterinary Sciences and Animal Husbandry, Jammu with the history of discharge of about 30 litres viscid fluid and continuous straining since early morning. Owner

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reported that the animal had completed 8th month of gestation and previous delivery was normal without any complications. Clinical observation revealed that the vulva and vagina were inflamed and swollen, animal appeared exhausted with rectal temperature 101.7°F, pulse rate 98/min and respiratory rate 19/minute.

TREATMENT AND DISCUSSION

The cow was restrained properly in standing position. After giving caudal epidural anesthesia (5 ml, 2% Lignocaine Hydrochloride), the birth passage was lubricated adequately using 1% carboxy methyl cellulose solution. Per vaginal examination revealed that fetus was in anterior longitudinal presentation, dorso-sacral position with severe left side deviation of head and neck. Fetus was live as fetal reflexes were present which was evident by suckling reflexes. The lower mandible was secured with the snare and the fetus was repelled and simultaneously traction was applied on the snare till the head was brought in its normal position. By applying forced traction with snare tied to fetlock region of both fore limbs the fetus was expelled. A live male fetus was delivered with head monstrosity. The placenta was removed by applying slight traction.

The uterus was siphoned with suction pump to remove the left over amniotic fluid and 5% DNS (4000 ml) and NSS (5000 ml) was infused I/V. Injection, Enrocin (Enrofloxacin) 15ml, Avil (Chlorphenaramine

maleate) 10ml and Melonex (Meloxicam) 15ml were administered intramuscularly. 4 boli of Pesurea were placed in uterus. The owner was advised to continue the treatment for next 4 days. Calcium borogluconate, 450 ml (300 ml slow I.V. and 150 ml S/C) and Injection Dexamethasone 60 mg were given intravenously on the day of treatment only.

The live fetal monster (Fig.) had prominent heart beat and deep abdominal respiration. All efforts were taken to save the calf but the calf died after half an hour. Scanty hairs were present on the body extremities with abdomen and thoracic region devoid of any hair. Multiple anomalies of head region were recorded in this calf as shortened upper jaw, prolonged lower jaw i.e. pig mouth condition (prognathism). Also there was accumulation of fluid in abdominal cavity as evident by distended abdomen of fetus.

The development of hydramnios is usually associated with fetal malformations. 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 hydramnios (Sloss and Dufty, 1980). Fetal head anomalies like shortened upper jaw, prolonged lower jaw (prognathism) seen in the present case might have led to impaired swallowing and thereby gradual increase in amniotic fluid. Similar findings were recorded earlier in cattle (Harper *et al.*, 1998)

and buffaloes (Christopher, 2000). The condition is very rare and develops due to autosomal recessive gene (Harper *et al.*, 1998). Fetal ascitis is occasionally associated with dropsical condition of the uterus, the fetus with distended abdomen may cause dystocia, these fetuses would fail to survive if delivered alive (Roberts, 2004). The prognosis for future breeding life of the dam is fair to good in this condition.

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Fig. Hydramnios with fetal monstrosity (prognathism)