

## DYSTOCIA DUE TO FETAL ASCITES, ANASARCA AND MICROMELIA IN A MURRAH BUFFALO- A CASE REPORT

SANDEEP KUMAR, JASMER DALAL and ANAND KUMAR PANDEY\*  
Department of Veterinary Gynaecology and Obstetrics, College of Veterinary Science,  
Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar-125004, INDIA

### SUMMARY

This communication reports a case of dystocia due to foetal anasarca associated with fetal ascites, micromelia and its successful per-vaginal management in a Murrah buffalo.

**Keywords:** Dystocia, Fetal anasarca, Fetal ascites, Murrah buffalo.

Dropsical conditions like fetal ascitis, fetal anasarca, edema of the allantochorion, hydrops of the amnion or allantois or both etc. are various causes of dystocia (Roberts, 1986) in domestic animals. Ascites is the accumulation of fluid in peritoneal cavity and anasarca is the generalized oedematous subcutaneous swelling (Bijurkar *et al.*, 2004) which lead to dystocia in buffaloes. Ascites of fetus may occur due to an anomaly in development leading to obstruction on the lymphatics and thus prevents the disposal of peritoneal fluid that may be linked with diminished urinary excretion of water (Jubb and Kennedy, 1970). The over production and inefficient removal of peritoneal fluid may also cause fetal ascites (Sloss and Dufty, 1980). Micromelia is a rarely reported condition characterized by stumpy one or more extremities (Kumar *et al.*, 2011). The present communication reports a case of dystocia due to fetal ascites, anasarca and micromelia in a buffalo.

A Murrah buffalo (Case no. E-8-173) of 8.5 months pregnant aged 6 years in its 3rd parity was presented to the Veterinary Clinical Complex, LUVAS, Hisar, with history of dystocia and straining since 12 hours and difficulty in delivery of fetus. Case was previously handled unsuccessfully at field level with traction on hind limbs and both the hind limb were amputated at knee joint. Per vaginal examination revealed complete dilatation of cervix with two stumps of hind limbs of posteriorly presented dead fetus. Further on deep vaginal examination revealed fluid filled extended fetal abdomen and subcutaneous oedema. Fetal head was swollen and it was lying below the pelvic brim with slight backward deviation of head. On per-rectal examination, weak fremitus and enlarged fetal size and no positive fetal reflexes were observed.

After epidural anaesthesia and proper lubrication, a stab incision was made with embryotomy knife on ventral abdominal wall of fetus to allow escape of peritoneal fluid. As fetus was fragile, remaining bones of

the hind limbs were extracted out manually. Initially, the forehead of the fetus was brought to pelvic floor firstly by holding and lifting of the muzzle with palm and applying gentle traction on the eye hook placed on the lower jaw. Due to tear of lower jaw due to traction, the eye hook was shifted from lower jaw to the left inner eye canthus and another eye hook was also applied to right eye canthus. The gentle traction on both the eye hooks and simultaneous repulsion on hind portion of fetus with arm helped in bringing the fetal head in the birth passage. Subsequently, both the fore limbs were also brought in passage then fetus was delivered with gentle traction. The fetus was hairless and it was found dead. The head, neck, abdomen and subcutaneous tissue were distended with fluid (Figure 1) and it was diagnosed as



Fig. 1 Showing hairless fetus anasarca with ascites and micromelia

“fetal anasarca with ascites”. Placenta was removed manually after 24 hours of fetal delivery. Further, the animal was treated with antibiotics, intrauterine therapy and supportive therapy for seven consecutive days. Later, buffalo recovered uneventfully.

It has been found that dropsy of fetal membranes and oedema of placenta may lead to fetal anasarca (Arthur *et al.*, 2001). Obstruction of lymphatics due to several reasons may prevent disposal of peritoneal fluid (Sloss and Duffy, 1980). It is said to be due to autosomal recessive

\*Corresponding author: dranandpandey@gmail.com

gene (Roberts, 1986) and electrolyte imbalance (Faber and Anderson, 1990). Similar case has been reported in buffalo with anasarca fetus associated with ascites micromelia condition (Kumar *et al.*, 2011). In the present case, we achieved successful per-vaginal delivery of anasarca fetus with ascites and short limbs in a Murrah buffalo.

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