

FETAL ANASARCA ASSOCIATED WITH HYDROALLANTOIS IN MURRAH BUFFALO

Anand Kumar Pandey*, Gyan Singh, Sandeep Kumar, Shyam Sunder and Rakesh Kumar

ABSTRACT

Delivery of a live anasarca fetus rarely associated with the dropsy of fetal membrane and its successful management is described here.

Keywords: anasarca, buffalo, dropsy of fetal membrane

INTRODUCTION

Fetal anasarca is a condition characterized by excessive accumulation of fluid in the tissue and body that causes subcutaneous edema of the fetus. It is mostly seen in cattle but may affect other species such as buffalo and sheep (Sloss and Dufty, 1980). The condition is commonly associated with either infectious diseases or developmental defects of fetus. Rarely mild hydrops of the amnion and/or allantois and edema of the placenta may result in fetal anasarca (Arthur *et al.*, 2001). The present case reports delivery of live anasarca fetus associated with hydroallantois in buffalo.

CASE HISTORY AND OBSERVATIONS

A Murrah buffalo (Case no. 8-1087) of

8.5 months pregnant aged 6 years in its 3rd parity was brought to the Teaching Veterinary Clinical Complex, Hisar, with history of bilateral abdominal distention for the previous 10 days. Per vaginal examination revealed a closed cervix with a dome shaped appearance due to extensive fluid in the uterus. On rectal examination, no fetal parts were palpable and uterus was filled with fluid. On the basis of history and clinical examination, the case was diagnosed as "Hydroallantois".

TREATMENT AND DISCUSSION

The buffalo was treated with inj. cloprostenol, 250 µg, i.m. and inj. dexamethasone sodium phosphate, 20mg, i.v. to induce parturition. Following 24 h of treatment, severe uterine contractions were made by dam and approximately 80 liters of uterine fluid drained out. Therefore, adequate fluid therapy along with supportive treatment was given to avoid shock. Thereafter, vaginal examination revealed a fetus in posterior presentation, dorso-sacral position with both hind limbs and tail extended towards birth canal. The fetal reflexes were present. Fetus was delivered by simple traction. Following delivery of fetus the animal was advised to administer antibiotics and supportive therapy for five consecutive days.

Teaching Veterinary Clinical Complex, College of Veterinary Sciences, Lala Lajpat Rai University of Veterinary and Animal Sciences, CCSHAU Campus, Hisar-125004 (Haryana), India, *E-mail: dranandpandey@gmail.com

The fetus was small, hairless and live, however, fetus was died after 5 minutes of its delivery. The head, neck, abdomen and subcutaneous tissue were distended with fluid (Figure). As per the characteristic feature of the delivered fetus, it was diagnosed as “fetal anasarca”.

Induction of parturition is always advised as a treatment of dropsy of fetal membranes in cattle (Roberts, 1986). It has been found that dropsy of fetal membranes and edema of placenta may lead to fetal anasarca (Arthur *et al.*, 2001). Such type of fetuses may or may not be live following delivery (Khasatiya *et al.*, 2009). The anasarca results due to disturbance of liquid exchange and may be of placental origin (Sloss and Dufty, 1980). It is said to be due to autosomal recessive gene (Roberts, 1986) and electrolyte imbalance (Faber and Anderson, 1990). The calf is usually aborted one or two months prior to term or may be delivered at term with dystocia (Sane *et al.*, 1994). In the

present case, we achieved successful induction of parturition and delivered a live anasarca fetus in a Murrah buffalo.

REFERENCES

- Arthur, G.H., D.E. Noakes, T. J. Parkinson and G. C. W. England. 2001. *Veterinary Reproduction and Obstetrics*, 8th ed. W.B. Saunders, London.
- Faber, J.J. and D.F. Anderson. 1990. Model study of placental water transfer and causes of fetal water disease in sheep. *American J. Physiol.*, **258**: 1257-1270.
- Khasatiya, C.F., D.M. Patel, D.M. Dabhi and P.P. Chaudhari. 2009. Dystocia due to foetal anasarca in a doe. *Indian J. Anim. Reprod.*, **30**: 93-94.
- Sane, C.R., D.P. Velhanker, B.R. Deshpande, A.S.



Figure. Fetal Anasarca.

Kaikink, S.B. Kodagali and P.D. Deopurkar.
1994. *A Text Book of Animal Reproduction
and Obstetrics*, 2nd ed. Varghese Publishing
house, Worli, Bombay, India.

Roberts, S.J. 1986. *Veterinary Obstetrics and
Genital Diseases*, 3rd ed. CBS Publishers
and Distributions, India. p. 98-102.

Sloss, N. and J.H. Dufty. 1980. *Handbook of
Bovine Obstetrics*. Williams and Wilkins,
Baltimore, London. p. 121.