

FOETAL MUMMIFICATION AND ITS OBSTETRICAL MANAGEMENT IN
A GRADED MURRAH BUFFALO – A CASE REPORT

Suresh Kumar Raju*, Reshma Abdul and Krishnakumar Karuppasamy, Sarath Tulasiraman,
Reena Devarajan, Rangasamy Sreerangan and Umamageswari Jeyakumar

Received: 10 May 2020

Accepted: 26 March 2023

ABSTRACT

Obstetrical management of a rare case of fetal mummification in a buffalo is reported and discussed.

Keywords: *Bubalus bubalis*, buffaloes, mummification, fetus, obstetrical

Teaching hospital with the history of prolonged gestation. On pervaginal examination the cervix was found closed. On per rectal examination the uterus was tightly contracted over the fetus and there was lack of fremitus and fetal fluids. On ultrasonographic examination the fetal contour was not proper with lack of echogenic fetal fluid. Based on per rectal and ultrasonographic examination the case was diagnosed as fetal mummification.

INTRODUCTION

Mummification of bovine fetuses is rare and has an incidence of less than 2% (Barth, 1986). Fetal mummification is characterized by fetal death without concomitant luteolysis (Lefebvre, 2015) and adequate cervical dilatation and occurs more frequently between three and eight months of gestation (Kumar *et al.*, 2013). The present case reports a rare case of fetal mummification and its successful medical management.

CASE HISTORY AND OBSERVATION

A primiparous graded Murrah buffalo was presented to the Madras Veterinary college

TREATMENTS AND DISCUSSION

Animal was induced with Inj. Cloprostenol sodium 500 mcg intramuscular on the first day. Cervical dilatation was monitored every 12 h after induction. After 42 h of post induction complete cervical dilatation was noticed. On pervaginal examination, the fetus was in anterior presentation with dorso sacral position and extended forelimbs were palpated. The fetus had empty eye sockets. Under caudal epidural anesthesia with 2% Lignocaine, after thorough lubrication of the birth passage with carboxy methyl cellulose, a mummified fetus was delivered manually by applying mild traction. Animal was treated with Inj. Meloxicam 0.2 mg/kg B.wt and



Figure 1. Mummified buffalo fetus.

Inj. Chlorpheniramine maleate 0.5 mg/kg B.wt intramuscularly. The animal was discharged with good condition.

The hypothesis of intrauterine mummification process is the dehydration of the fetus and fetal membranes, which neutralizes the autolysis of tissues in the absence of oxygen and bacteria (Daneshmand *et al.*, 2003). The condition is often diagnosed only when the animal is examined because of a prolonged gestation period (Arthur *et al.*, 1996). The treatment of choice remains as induction of luteolysis by injection of PGF₂α, that follows the expulsion of the mummified fetus within 2 to 4 days (Jackson and Cooper, 1977). Kumaresan *et al.* (2013) used combination of estradiol and Cloprostenol in cows for expulsion of fetal mummy but in the present case injection Cloprostenol alone was used to expel the mummified fetus as reported by Shivhare *et al.*, 2016.

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Jackson, P.S. and M.J. Cooper. 1977. The use of cloprostenol for the termination of pregnancy and the expulsion of mummified fetus in cattle. *Vet. Rec.*, **100**(17): 361-363. DOI: 10.1136/vr.100.17.361

Lefebvre, R.C. 2015. Fetal mummification in the major domestic species: current perspectives on causes and management, *Veterinary medicine (Auckland, N.Z.)*, **6**: 233-244. DOI: 10.2147/VMRR.S59520

Shivhare, M., Sumankumar, M.S. Thakur and S.P. Shukla. 2016. Management of mummification of fetus in a Murrah buffalo - A case report. *Buffalo Bull.*, **35**(4): 507-509. Available on: https://kukrdb.lib.ku.ac.th/journal/BuffaloBulletin/search_detail/result/357686

REFERENCES

- Arthur, G.H., D.E. Noakes, H. Person and T.J. Parkinson. 1996. Sequelae to embryonic or foetal death, p. 127-128. *In Veterinary Reproduction and Obstetrics*, 7th ed. W.B. Saunders, Philadelphia, USA.
- Barth, A.D. 1986. Induced abortion in cattle. p. 205-208. *In Morrow, D.A. (edn.) Current Therapy in Theriogenology*, 2nd ed. WB Saunders, Philadelphia, USA.
- Daneshmand, S.S., C.Y. Cheugn and R.A. Brace. 2003. Regulation of amniotic fluid volume by intramembranous absorption in sheep: Role of passive permeability and vascular endothelial growth factor. *Am. J. Obstet. Gynecol.*, **188**(3): 786-793. DOI: 10.1067/