

MANAGEMENT OF MUMMIFICATION OF FETUS IN A MURRAH BUFFALO – A CASE REPORT

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ABSTRACT

A Murrah buffalo with the history of prolonged gestation of undiagnosed condition was referred to Teaching Veterinary Clinical Service Complex (T.V.C.S.C.) in College of Veterinary Science and Animal Husbandry, Rewa. The animal after confirmation diagnosis of mummified fetus was treated with Inj. Clostenol 500 mg by intramuscular route. The mummified fetus was expelled at 72 h post injection, preceded by Yellow-brown thick discharge later becoming tinged with mucus. Mild traction was applied for extraction of fetus due to narrow vaginal passage. The recovery was an even full.

Keywords: Murrah buffalo, mummification, fetus, clostenol

is very low 0.43 to 1.8% (Dabas *et al.*, 2011). Fetal mummification has been reported in several species, including the sheep, goat, horse, pig, dog and cat, but it is more common in cattle. Breed and previous occurrence seem to be risk factors with a higher incidence of fetal mummification in Guernsey and Jersey cattle, and a higher risk (30%) of recurrence. mummification occurs between the 3rd and 8th months of gestation (Roberts, 1986), without concomitant luteolysis of the corpus luteum (CL) and opening of the cervix. Fetal mummification associated with a persistent CL is observed mainly in cattle and goats, both species being dependent on progesterone produced by the CL for the maintenance of pregnancy. (Lefebvre *et al.*, 2009). The present communication reports a rare case of fetal mummification in buffalo with its successful clinical management.

INTRODUCTION

Mummification of bovine fetuses is an uncommon condition with an incidence of less than 2%. Fetal mummification is associated with a series of morphological alterations that occurs to a fetus which dies and retained in the uterus, however, the occurrence of the disease in cattle

CASE HISTORY AND CLINICAL OBSERVATION

A primiparous Murrah buffalo which completed gestation period of 310 days with no pre monitory signs of parturition with absence of relaxation of sacrosciatic ligament and failure of mammary gland development as per gestational

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stage was presented for treatment. The owner who got the buffalo examined by a local veterinarian with diagnosis of mummification of fetus who referred the animal to T.V.C.S.C., Rewa for surgical management, The buffalo was brought to T.V.C.S.C., Rewa where a mummified fetus was diagnosed by rectal palpation confined on just floor of the pelvis, absence of fetal fluid, fetal bump, very weak fremitus crumbled uterine wall and closed cervix were diagnostic finding.

TREATMENT AND DISCUSSION

The animal was secured in the travis. On first day the animal was injected Clostenol 500 µg I/M, Inj. Meloxicam 15 ml and Inj. Chlorphemaramine maleate 10 ml along with fluid therapy was also given because of anorexia. the owner was advised to keep close watch on the vaginal discharge or any other discomfort to the animal for a period of 72 h, however the animal was presented 48 h post injection following escape of yellowish-brown sticky discharge tinged with mucus with no straining on per rectal examination revealed mummified fetus still present in the uterus with increased tonicity, the cervix was open two finger width on vaginal examination with in accessible fetus. On this day about 100 ml sterile edible oil was infused by intrauterine beside this Inj. Meloxicam 15 ml and Inj. Chlorphemaramine maleate 10 ml repeated, the owner was advised to keep close watch on the vaginal discharge or any other discomfort to the animal.

The animal was examined at 72 h. post injection first per rectally, where in fetus was expelled in the vagina, which was extracted with moderate traction per-vaginally after posterior epidural anesthesia (Inj. Xylocaine-4 ml) due to

animal resistance to vaginal hand entry, owing to narrow passage. On fourth day the yellowish-brown mucoid discharge was escaping from vagina, lugol's iodine 1:80 dilution about 200 ml was infused in the uterus to guard against infection and to speed up recovery. Arthur *et al.*, 1996 reported that the treatment of mummified fetus with PGF_{2α} created some complexity in cattle viz. maceration of mummified fetus and packed in the birth canal instead of expelled out. Similar finding was present in the case under study and fetus was expelled with mild traction following lubrication of genital passage.

Clostenol administered alone intramuscular was effective in expulsion of mummified fetus by causing luteolysis and subsequently rise in estrogen level from developing follicles, which aided in uneventful recovery of the animal however some persons have used estradiol and Clostenol combination (Kumaresan *et al.*, 2013) with mummified fetus. Thus it is concluded that Clostenol may be used as first treatment in mummified cases in buffaloes though the incidence of such mummification is sporadic.

REFERENCES

- Arthur, G.H., D.E. Noakes, H. Person and T.J. Parkinson. 1996. Sequelae to embryonic and foetal death, p. 127. *In Veterinary Reproduction and Obstetrics*, 7th ed. Philadelphia, W.B. Saunders.
- Arumugam, K., S. Chand, S. Suresh, T.K. Mohanty, S. Prasad, S.S. Layek and K. Behera. 2013. Effect of estradiol and cloprostenol combination therapy on expulsion of mummified fetus and subsequent fertility in four crossbred cows. *Veterinary Research*

Forum, **4**(2): 85-89.

Dabas, V.S. and C.F. Chaudhari. 2011. Management of mummified foetus in a cow. *International Journal for Agro Veterinary and Medical Sciences*, **5**(3): 365-367.

Lefebvre, C.R., E. Saint-Hilaire, I. Morin, G.B. Couto, D. Francoz and M. Babkine. 2009. Retrospective case study of fetal mummification in cows that did not respond to prostaglandin F₂ α treatment. *Canadian Vet. J.*, **50**(1): 71-76.

Roberts, S.J. 1971. *Veterinary Obstetrics and Genital Diseases*, 3rd ed. Ithaca.