

FOETAL MUMMIFICATION OWING TO SEVERE THERMAL BURN IN AN INDIGENOUS COW

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ABSTRACT: A very rare incidence of bovine foetal mummification owing to thermal burn injury and its successful obstetrical treatment and management with the extraction of an inert mummified foetus diagnosed to be an atypical amorphous globocephalus foetal monster at its 2nd trimester of development is reported.

Key words: Mummification, Thermal burn, Bovine, Foetus.

Mummification of bovine foetus can be regarded as a gestational accident, occurring sporadically both in indigenous as well as exotic cattle and their crosses too (Arthur et al. 1989). It is characterized by abortion, absence of estrum or parturition, absorption of foetal and placental fluids, contraction and thickening of uterine walls, resorption of the placentomes and the presence of hard firm foetus in the closely applied uterine horn deep in the abdominal cavity (Roberts 1972, Williams 1951). It has also been recorded in buffalo as haematic mummification (Rao *et al.*, 1978).

Case history:

A local indigenous cow was presented to the clinic with the complaint of the release of viscous, chocolate colored uterine discharge with mild to moderate intermittent straining for last three (3) days with impending parturition (Fig.1). History revealed that the cow was

inseminated eight months earlier and the cow met an accidental thermal burn injury causing full thickness burn owing to catch fire in the cow shed in a wintry night four months earlier from the date of presentation of the animal to the clinic. The cow was then treated by the local paravets pretty long for atleast 2 to 3 months with conventional medicines like parenteral antibiotics, analgesics, antihistaminics, multipurpose herbal gels and even with the steroids time to time along with multivitamins and multiminerals supplementation. Pregnancy diagnosis was not made earlier.

Although eight months had been elapsed since the cow was subjected to natural service, but there was complete absence of external manifestation of pregnancy symptoms like increase in size of abdomen (*i.e.* lack of abdominal distension), foetal development, development of udder etc. The cow also had not returned to oestrus. The case was suspected

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Fig. 1: Extensive thermal burn injury causing foetal mummification in a cow, showing intermittent straining.



Fig. 2: Extracted mummified foetal monster showing unorganized foetal lump resembling amorphous globocephalus.

for intrauterine death (IUD) of the foetus with impending abortion based on the history and clinical manifestations. Pervaginal examination revealed imperfect cervical dilatation.

Treatment:

The cow was given Inj. Valthamate bromide. (Epidosin ® @ 10ml), Inj. Clostenol ® (Zydus AHL) @ 2 ml combined with dexamethasone (Dexona ® Zydus AHL) @ 12 mg administered by IM injection and allowed to rest.

After elapse of two and half hours once again per-vaginal examination was made and perfect cervical dilatation was felt. Further deep exploration revealed the presence of a dead unorganized foetal lump lying on uterine body. The foetus was removed with the release of scanty viscous, red brown, chocolate coloured discharge. It was an undersized and unorganized foetal mummy and found to be a foetal monster without resembling as an atypical amorphus globocephalus bovine foetal monster (Fig.2). The mummy measured 20 cm (approx) along

the spine and weighed 1.20 kg., skulls and bony skeleton were apparently absent and revealed as a unorganized fleshy foetal lump. The monster was completely devoid of hairs and the age of the monster mummy was assessed as 3 months since the death of the foetus could have happened during thermal burn accident and sufferings.

After removal of the foetus, uterine wash with 0.25% Lugol's solution was given and C-Flox uterine ® (Intas) @ 50ml was administered into the uterus for 3 consecutive days. The cow manifested oestrous one month latter and conceived being served by artificial insemination. The cow is now pregnant bearing a conceptus of about 3 months as per A.I. history and morpho-anatomical consideration of the foetus in uterus.

Foetal and other uterine factors seemed to have played minor role, however, severe thermal burn injury causing full thickness burn of the cow in early gestation (in first trimester) and prolong medication with various drugs having foeto toxic effects caused death of the

foetus and subsequent foetal mummification with the resorption of foetal fluids and coagulum. However, neither torsion of uterus nor abnormal location of umbilical cord was seen. The only significant factor was that the animal was subjected to severe stresses for prolonged medication with different drugs and its combination owing to its accidental burn injury. Not a single incidence of bovine foetal mummification owing to consequence of thermal burn injury has been reported in cattle. Hence, the present communication has been made to record a case of bovine foetal mummification.

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