

PARTIAL FETAL MUMMIFICATION IN MURRAH BUFFALO ASSOCIATED WITH PROLONG GESTATION

Dushyant Yadav¹, Brijesh Kumar^{2,*}, Akhil Patel³, Vikas Sachan⁴, Sanjay Yadav⁵, Abhishek Kumar⁴, Anuj Kumar⁴ and Atul Saxena⁴

ABSTRACT

This article details about successful management of prolong gestation associated with partial mummification in buffalo.

Keywords: *Bubalus bubalis*, buffaloes, mummification, prolong gestation, Murrah buffalo, dilation therapy

INTRODUCTION

Bovine fetal mummification may occur from the 3rd to 8th month of gestation. The condition usually accompanied with slight to severe interplacental haemorrhage causing a separation of the maternal and fetal placenta (Roberts, 1971). Mummification of bovine fetuses is an uncommon condition with the incidence reported to be less than 2% (Barth, 1986). Fetal mummification has been reported in several species, including the sheep (Hailat *et al.*, 1997), goat (Tutt, 1997), horse (Meyer and Varner, 1991), pig (Christianson, 1992), dog and

cat (Johnston and Raksil, 1987). Several potential causes for this condition have been proposed *viz* bovine viral diarrhoea (BVD), leptospirosis, and molds (Roberts, 1962), compression or torsion of the umbilical cord, or both (Mahajan and Sharma, 2002), uterine torsion (Moore and Richardson, 1995), defective placentation (Irons, 1999), genetic anomalies, abnormal hormonal profiles and chromosomal abnormalities (Stevens and King 1968). The present case report deals with per vaginal delivery of partially mummified fetus associated with prolong gestation.

CASE HISTORY AND CLINICAL EXAMINATIONS

A Murrah heifer aged between 3 to 3.5 years was presented at the Teaching Veterinary Clinical Complex (T.V.C.C.) of DUVASU, Mathura, U.P. with the history of natural service and subsequent non return assumed to be pregnant. After passing of 10 months the animal was examined for pregnancy status and local veterinary practitioner

¹Banaras Hindu University, Varanasi, India

²Indian Council of Agricultural Research, Indian Veterinary Research Institute, Uttar Pradesh, India,

*E-mail: drbrijeshvet02@gmail.com

³Sardar Vallabhbhai Patel University of Agriculture and Technology, Uttar Pradesh, India

⁴Department of Obstetrics and Gynaecology, U.P. Pt. Deen Dayal Upadhyay Veterinary and Animal Sciences University (DUVASU), Uttar Pradesh, India

⁵Department of Obstetrics and Gynaecology, College of Veterinary Science and Animal Husbandry, U.P. Pt. Deen Dayal Upadhyay Veterinary and Animal Sciences University (DUVASU), Uttar Pradesh, India

informed about pregnancy and doubted about owner record because of size and owner history. Again farmer waited for more than 2 months and get examined the animal with a vet who confirmed the pregnancy however, advised to get the animal examined at the University clinics. With this history owner presented the buffalo Teaching Veterinary Clinical Complex, DUVASU Mathura and by the time animal crossed 13 month after service. The animal was examined per-rectally which revealed a distended uterus with fetus, however lack fetal fluid. In order to confirm lack of fluid U.S.G. was conducted which revealed grey shadow resembling presence of thick fluid. Per-vaginal examination further revealed a closed cervix. It was then decided to go for dilation therapy and owner was informed about pathological pregnancy.

TREATMENT AND DISCUSSION

Following consent of the owner the animal was treated with the dilation therapy comprising combination of drugs i.e. Betamethasone 40 mg, Valethamate Bromide 64 mg, Estradiol Valerate 30 mg and Cloprostenol sodium 500 ug for dilation of cervix. All drugs were given intra muscularly and owner was advised to wait for next 48 h. After 24 h of treatment buffalo was examined per vaginally and cervix have one finger dilation. Re-examination after 48 h revealed softening of cervix and more than 3 fingers dilation. On the same day owner reported oozing out of thick greyish vaginal discharge. It was then decided to wait further and after nearly 60 h of treatment per vaginal examination was conducted which revealed a complete dilation of cervix along with presence of fetus in anterior presentation and thick vaginal discharge (Figure 1). Fetus was

then manipulated per-vaginally after rupturing of thick placental membrane. The deviated head was brought to normal posture and traction was applied for delivery of the fetus. Without much effort fetus was delivered which was diagnosed as partially mummified based on thick greyish discharge without foul smell, dry and exceptionally thick fetal membrane with necrosed cotyledons. Further fetus was found to have a sunken eye without any eye ball (Figure 2). The delivered fetus was a female, comparatively small in size, weighing 14.50 kg with thick and dry fetal membrane (Figure 4) around it and the cotyledon was totally necrosed (Figure 3). The animal was subsequently treated with DNS (5%) 4 lit., RL 2lit.I/V, Tetracycline 3 gm I/Ut., Intacef 3 gm I/M, Melonex 1000 mg I/M, Avilvet 10 ml I/M, with the advise to follow the treatment for 3 days. The animal was kept indoor. After remaining for next 2 days the uterus was responded to therapy and animal was recovered uneventfully.

Roberts (1986) stated that if the mummified foetus exists longer period in the uterus, the condition become drier, firmer, and more leather like tissues of the foetus. He also stated that the cotyledon and fremitus are not palpable. The foetus and uterine environment are usually sterile; therefore, culturing the foetus is of little value (Elmore, 1992). Although parenteral antibiotic therapy was used in the present case to prevent probable uterine infection, a thick greyish vaginal discharge was seen, so intrauterine treatment was performed. Uterine infusion instead of parenteral antibiotic therapy should have been used to prevent probable uterine infection after expulsion of the fetus.



Figure 1. Thick greyish vaginal discharge after.



Figure 2. Extracted fetus 48 h of dilation therapy.



Figure 3. Expelled thick and dry placenta.



Figure 4. Expelled placenta with degenerated cotyledons.

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