VAGINAL DELIVERY OF MUMMIFIED FETUS IN A CROSSBRED COW

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ABSTRACT

A case of fetal mummification probably developed at 5-6 months of gestation that was successfully delivered per vaginum following use of prostaglandin, corticosteroid and valethemate bromide in a primiparous HF crossbred cow is put on record.

Key words: Mummification, Therapeutic agent, HF crossbred cow

INTRODUCTION

Mummification is an undesirable sequel to fetal death without abortion, often after complete ossification of bones whereby the resorption of fetus can not take place. This condition is said to be more common in pigs and cats carrying large litters as a consequence of uterine overcrowding and placental insufficiency (Arthur *et al.*, 1996). In cattle, mummification occurs following death of fetus between 3 and 8 months of gestation and the data revealed the incidence as 0.13 to 1.80 % (Berth, 1986). The present communication reports a case of mummified fetus delivered per vaginum by using naturally occurring prostaglandin $F_2\acute{a}$, corticosteroid and valethemate preparations.

CASE HISTORY AND OBSERVATIONS

A primiparous HF crossbred cow about three and half years old was attended at the doorstep of a farmer with a history that it was overdue from her prospective calving i.e. 10 months & 2 days, but no symptoms of udder development, enlargement of abdomen and parturition were noticed, even though previously it was confirmed as positive for pregnancy per rectally at 3 months of gestation. Rectal palpation revealed a firm mass of fetus inside the tightly contracted uterus in the abdominal cavity. Cervix was hard, indurated and tightly closed. The case was diagnosed as of fetal mummification.

TREATMENT AND DISCUSSION

The treatment was attempted by administering Dinoprost tromethamine (Lutalyse, Pfizer, Belgium, NV) 25 mg i.m. Moreover, Dexamethasone 40 mg (Dexona-Vet, Zydus Animal Health Ltd) and Valethamate bromide 50 mg (Epidosin, TTK, Healthcare Ltd) were also given i.m. daily for 3 days. Per vaginal examination was performed once in 24 hours. Cervical relaxation could occur up to two fingers only of first two-three cervical rings after two days of treatment. After 72 hours, a second dose of 25 mg Dinoprost tromethamine was administered. The case was kept under observation. Symptoms of parturition were noticed after five days of last dose of Dinoprost tromethamine. The hard fetus mass completely dry with chocolate brown coloured pasty material adhered to it was expelled out. The mass was rigid and compact and the portion of neck and all four limbs were bent to form a contracted elongated mass covered by whole atrophied placenta (Fig).

A reddish brown chocolate coloured sheet of placenta was found loosely adherent around the fetus and small atrophied placentomes were counted to be 88, out of this 62 in the gravid portion and 26 in the non-gravid portion. The autolysed placenta did not emit any foul smell.

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The crown-rump length of the fetus was 11 inches. It was concluded that the death of the fetus would have occurred at the stage of 5 months of gestation (2 x C.R. = equal to month of gestation). The pasting of chocolate red coloured jelly on fetal mass was clarified mummification as haematinic type.

Expulsion of mummified fetus by administration of luteolysin and beta-methasone has been reported as early as 12 -14 hours (Saxena *et al.*, 2001) to 8 days (Srinivas *et al.*, 2007) after completion of treatment. Whereas, Markandeya *et al.* (2003) reported successful use of Valethamate bromide 150 mg and PGF_2á 25 mg i.m., the fetus was expelled within 30 hrs of treatment by the cow without necessity of any assistance. However, in non-responding cases, the fetus may have to be delivered by caesarean operation as reported by Phogat and Gupta (1996). Delivery of such mummified fetus by caesarean operation in an Ongole cow has been reported by Mutha Rao *et al.* (2009) where history revealed overdue from her prospective calving. Awasthi and Tiwari (2002) have reported successful expulsion of mummified fetus with treatment of single injection of prostaglandin. Vaginal delivery of the mummified fetus by use of Dexamethasone, Valethamate bromide and two successive injection of prostaglandin F_2á at 72 hours apart was found successful in the present case.

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Fig. Mummified fetus