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RESEARCH ARTICLE

THERAPEUTIC MANAGEMENT OF FETAL MUMMIFICATION IN A CROSSBRED JERSERY COWS

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ABSTRACT

A clinical case of mummified foetus was successfully managed by using inj. PGF₂α in a crossbred jersey cow.

Key words:

Cross bred cow,
Foetal mummification,
Prostaglandin.

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INTRODUCTION

A farm economy depends upon a calf per year per cow. Mummified foetus is a reproductive disorder which is responsible for farm economic loss by extending the inter calving period as well as foetal loss. Mummification is an undesirable sequel to fetal death without abortion, often after complete ossification of bones whereby the resorption of fetus cannot 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 -vaginal by using synthetic occurring prostaglandin.

Case History

A crossbred jersey cow in its 2nd lactation was presented with a history of a prolonged gestation more than 10 month and not showed any parturition sign and no udder development. The pregnancy was diagnosed at 3 month of gestation.

Physical parameters are with in normal range. Pre vaginal examination revealed closed cervix. Per-rectal examination revealed hard mass about football size with in uterus. No other passible sings for normal viable pregnancy. Fremitus absent. Entire uterine contour was palpable at the level of pelvic inlet.

DISCUSSION

The treatment was attempted by administering inj. Prostaglandin F₂α 500 µg i.m. (Pragma 2 ml). Per-vaginal examination was performed after 24 hours of prostaglandin injection. Cervical relaxation could occur up to three fingers only. After 24 hours, a second dose of 500 µg Prostaglandin F₂α was administered. The cow was kept under observation. On vaginal examination done after 38 hours of first Prostaglandin F₂α injection. The cervix was one hand dilated and a huge bony mass draped within the foetal membranes was palpated. The hard fetus mass completely dry with chocolate brown coloured pasty material adhered to it was expelled out. 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. Haematic mummification is one of the common features of abnormal fetal development in bovines. The incidence of this condition has been reported to vary between 0.13 to 1.8%,

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although in some herds it may be higher (Barth, 1986). The death of a fetus in the uterus without simultaneous luteolysis and cervical relaxation ensures fetal retention. Mummification results due to autolytic changes in fetal tissues and resorption of fetal fluids in a sterile uterine environment. The dead fetus shrinks through loss of water from the tissues and mummifies.

Empty Eyeball Placenta



Fig. 1. Mummified fetus

The hemorrhage which occurs between the endometrium and placenta imparts a reddish-brown due to the fetus and fetal membranes. However, whether the hemorrhage is the cause of fetal death or its sequel is debatable (Noakes *et al.*, 2001).

Arthur *et al.* (1996) reported that the treatment of mummified foetus with $\text{PGF}_2\alpha$ created some complexity in cattle viz. maceration of mummified foetus and packed in the birth canal instead of expelled out. However, no such complication was experienced in the present study and the mummified foetus was easily delivered by mild traction after 72 hour of the therapy. Later, due to luteolysis of the corpus luteum the animal showed oestrous on 48th day post-partum.

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