

Case Study

SPONTANEOUS EXPULSION OF MUMMIFIED FOETUS IN A COW: A CASE REPORT

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Abstract: A seven year old Holstein Friesian crossbred cow was shown the hanging of foetal membranes from vulva. Vaginal examination revealed that the presence of hard foetus along with foetal membrane inside the vaginal cavity with closed cervix. A case of mummified foetus inside the vaginal cavity due to regression of Corpus luteum and its successful delivery through simple traction has been discussed.

Keywords: Cow, Corpus luteum, Mummified foetus, Vaginal cavity.

Introduction

Failure of pregnancy is usually divided into stages based on the foetus's development and potential viability: embryonic mortality and foetal mortality. The exact outcome of early foetal mortality is unpredictable and influenced by several factors, such as the cause of the foetal mortality, species differences, stage of gestation at foetal death, and number of foetuses. One possible outcome of foetal death is mummification (Lefebvre, 2015). Resorption of the foetal body fluids, foetus become dry and paper like appearance are denotes Haematic mummification (Arthur *et al.*, 1996). Incidence of Foetal mummification in cattle is 0.13–1.8 per cent and occurs after the first trimester of gestation (Roberts, 1986) it could not be diagnosed due to the placenta and corpus luteum (CL) are capable of producing sufficient progesterone. Foetus can remain in the uterus for between 150 and 200 days or a normal gestation period in undiagnosed cases (Johnson *et al.*, 1981). The causes of mummification are poorly described, and infectious disease like campylobacteriosis, molds, leptospirosis and bovine viral diarrhea may cause foetal death without abortion which results in foetal mummification (Drost, 2007). The present case records the Haematic mummified foetus and its successful management.

Case history and observations: A seven year old pluriparous Holstein Friesian cow had a history of hanging of foetal membranes from the vaginal cavity and that the animal was

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inseminated at nine and half months before. Per rectal examination reveals the non-gravid uterus and absence of CL on the ovaries. On per vaginal examination, dry and rigid foetal mass were palpated in the vaginal cavity and dry paper like foetal membrane was surrounding the foetus and part of it was hanging outside the vaginal cavity with closed cervix. Based on the observation, this case was diagnosed as foetal mummification.

Treatment and discussion

The vaginal cavity was lubricated by application of the obstetrical cream (Cetrimide). Mild traction was applied on the foetal mass; the mummified foetus was removed along with the foetal membranes. Gross examination of the foetus revealed dry and hard foetus attachment with paper like foetal membrane on the head region (Fig. 1). After the delivery of the foetus antibiotics and anti-inflammatory drugs were administered to the dam. Expulsion of mummified foetus from the uterus due to the regression of corpus luteum. Animal was recovered Uneventfully.

A rapid functional regression of the CL due to uterine $\text{PGF}_2\alpha$ surge which characterised by inhibition of progesterone release and followed by a structural regression (Pate, 1994). But most of the mummified foetus cases regression of CL only achieved by administration of $\text{PGF}_2\alpha$ analogues (Yilmaz *et al.*, 2011). Some of the mummified foetus may pass into the vaginal cavity because of regression of the corpus luteum and the cow returns to heat (Jackson, 2004). Cows usually conceive on the first or second oestrous cycle even after expulsion of mummified foetus and also prognosis for fertility is good foetal mummification condition (Roberts, 1986).

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Fig.1. The Mummified foetus with foetal membrane.