SPONTANEOUS EXPULSION OF MUMMIFIED FOETUS IN A COW: CASE REPORT

G. Rajkumar[1] and M. Arokia Robert[2]
Devathur Input Route, The Dindigul District Co-Operative Milk Producer's Union Ltd, Dindigul- 624 000, Tamil Nadu

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Introduction

Foetal mummification occurs with an incidence of 0.13-1.8% in cattle, (Arthur *et al*., 1996). In foetal mummification cases, resorbtion of the foetal body fluids and most of the cases the mummified foetus become dry and paper like. It is called papyraceous mummification (Arthur *et al*., 1996). Foetal mummification occurs after the first trimester of gestation (Roberts, 1986) but it cannot be diagnosed, because the placenta and corpora luteam (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 agents like *Campylobacter foetus*, molds, leptospriosis and BVD-MD virus may cause foetal death without abortion may result into mummification in cattle (Drost, 2007). In the present paper, a unique case of papyraceous mummified foetus that was present in the vaginal cavity due to the regression of corpus luteum.

Case history and observations

A 7-year-old Holstein Friesian cow in her fourth parity had a history of hanging the dry paper like foetal membranes from the vaginal cavity. And that animal was inseminated at nine and half month back. Feed intake was normal, temperature was 38.2ºC, and heart rate was 62/min. Rectal examination reveals the non-gravid uterus. There was no presence of corpus luteum and follicular cyst on both the ovaries. On the vaginal examination, dry and rigid foetal mass were palpated in the vaginal cavity and dry paper like foetal membrane was surrounded the foetus and part of it was hanging outside the vaginal cavity. Cervix was fully closed. Finally, the case was diagnosed as foetal mummification and expulsion of mummified foetus from the uterus due to the regression of corpus luteum.

Treatment and Discussion

The lubrication of the vaginal cavity was done by liberal application of the obstetrical gel (Cetrimide). Mild traction was applied on the foetal mass; the mummified foetus was delivered along with the foetal membranes. After the delivery of the foetus dam was administered with antibiotics, anti inflammatory and antihistaminic drugs on the day. Uneventful recovery of the dam was noticed. In the present case, gross examination of the foetus revealed dry and hard foetus with attachment paper like foetal membrane at the head region (Fig. 1). A rapid functional regression of the CL due to uterine PGF2α surge which characterised by inhibition of progesterone release and followed by a structural regression (Pate, 1994). Most mummified foetuses will remain until treatment is given to expell them or until they are removed by ceaserean section (Rajoriya *et al*., 2014). But most of the mummified foetus cases regression of CL only achieved by administration of PGF2α 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 oestrus cycle after expulsion when prognosis for fertility after foetal expulsion is good (Roberts, 1986).

Fig. 1: Mummified foetus

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[1]G.Rajkumar, Veterinary Consultant, The Dindigul District Co-Operative Milk producer's Union Limited. Email: rajvet15@gmail.com; [2]M.Arokia Robert, Veterinary Practitioner. Email: arokiarobert@gmail.com