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A case study on retained fetal membrane in a post-parturient cow

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Abstract

A non-descript cattle was presented with the history of parturition before 24 h, and protruding fetal membrane from the vulva. Vaginal and rectal examination were performed to remove the fetal membrane. Antibiotic medications were placed through intrauterine route, leading to the successful management and recovery of the animal.

Keywords: Fetal membrane, bovine, antibiotic medication, animal, post-parturient cow

Introduction

Retention of fetal membrane is one of the most common complications in ruminants following parturition. Predisposing factors of RFM include dystocia, abortion, stillbirth, premature parturition, hypocalcemia, cesarean section, twinning, fetotomy, nutritional deficiencies, infectious organisms and immunosuppression. Incident rate is 22.8% in dairy cows (Durrani *et al.*, 2009) ^[1]. RFM leads to high risk conditions such as displaced abomasum, ketosis, mastitis and metritis. Majorly, it negatively impairs the subsequent pregnancy and lactation (Petkova and Georgieva, 2025) ^[3].

Case history and observations

A 4 year old non-descript cattle was brought with the history of protruding fetal membrane from the vulva (Figure 1). It was reported that the animal gave birth to male calf the day before and this is her third pregnancy. External examination showed the presence of edematous vulva and protrusion of discolored foul-smelling fetal membrane.

Treatment

Rectal and vaginal examinations were carried out gently to remove the parts of retained fetal membrane without applying excessive traction. Intra-uterine application of antibiotic medication, oxytetracycline hydrochloride (500 mg) 4 capsules were carried out. Administration of meloxicam @ 0.5 mg/kg i/m for 3 days and ceftriaxone @20mg/kg i/m for 5 days were followed. Farmer was advised to give proper nutrition.

Results and Discussion

Retention of fetal membrane (RFM) or Retention of placenta (ROP) is generally defined as the failure to expel placenta or fetal membranes, 6-24 hours post-partum. It can be classified as primary and secondary retention. Primary retention happens due to the failure of detachment of placenta from the maternal caruncles, whereas secondary retention occurs due to difficulty in expelling the already detached placenta (Patel *et al.*, 2016) ^[2]. It can be diagnosed by finding foul smelling and discolored membrane protrusion from the vulval region. In the present investigation, cattle recovered completely without any secondary complications like metritis, cervicitis or vaginitis. The use of antimicrobial therapy has shown positive results. Proper nutrition and care during dry period, along with prevention of excess body weight gain shall reduce the incidence of RFM.

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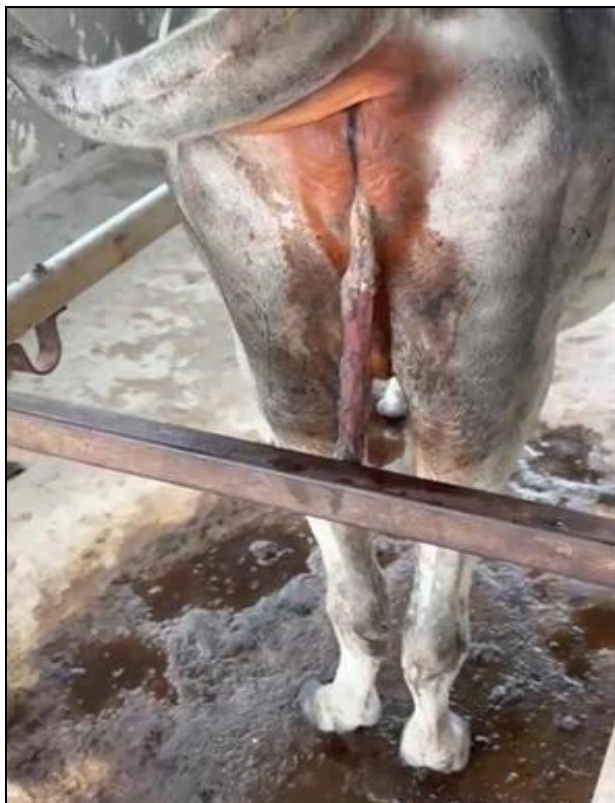


Fig 1: Protrusion of retained fetal membrane from vulva

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Conclusion

Gentle removal of part of the fetal membrane without excess traction, along with intra-uterine application of antibiotics demonstrated successful management of retention of fetal membrane in cattle.

Conflict of Interest

Not available

Financial Support

Not available

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