

Retention of placenta in mithun crossbred cow (Phre) – A case report

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Introduction

The mithun cattle crossbred in north eastern states locally is called as Phre. In general, the placenta is expelled within five hours and average weight, length and width are 2.51 ± 0.51 Kg, 194.08 ± 24.97 cm and 40.67 ± 2.72 cm, respectively in mithun [1]. Studies on reproductive disorders in Phre are scanty. Therefore, the present report-retained placenta in crossbred mithun is placed on record.

Case history and clinical observations

The mithun x cattle crossbred cow was purchased by NRC on mithun from the mithun festival which was held in Kohima, Nagaland during November, 2011. The blood level of this Phre cattle comprise of 75% of cattle (*Bos indicus*) and 25 % of mithun (*Bos frontalis*) as per the record of owner. The Phre cow was examined per rectally at the time purchased and was confirmed as pregnant. The animal delivered a healthy female live calf without any assistance. However, apparently normal placenta was retained partially (most portion was hanging outside the vulva) for 24 hours after parturition. The behaviour and physiological parameters (temperature, pulse and respiration) of the animal were in normal limits [2,3]. Per vaginally exploration with aseptic measures revealed partial placental retention at ovarian end of the gravid right horn.

Treatment and Discussion

The retention of placenta creates a number of potential problems due to the possibility of uterine infection [4]. The Phre cow was restrained following low epidural anaesthesia (6 ml, 2% Lignocaine hydrochloride). The hanging placenta was held in right hand and twisted like a rope in order to manage easily during its manual removal. A lubricated left hand was advanced into site of placental retention (right horn). Individual cotyledons and caruncles were grasped between thumb and fingers and structures were separated by rolling, pushing and squeezing motion. Simultaneous traction on placenta with right hand helped in easy separation. The Phre cow was treated with four intrauterine boluses and each bolus contained 60 mg of Nitrofurazone and 6 g of Urea, 2.5g Streptopenicillin (2.5 g) intramuscularly for five days and 200

mg meloxicam intramuscularly for three days [5,6]. The animal recovered uneventfully.

Gross examination revealed an apparently normal placenta without any inflammatory changes. The causes for retained placenta in cattle include twin births, caesarean section, dystocia, abortions, premature calvings or specific infection like *brucellosis*, *leptospirosis*, *vibriosis*, *listeriosis*, *Neospora caninum* infections [7] and infectious bovine rhinotracheitis [8,9]. However such type of parallel studies on cause and incidence of retained placenta in mithun or its crossbred are scanty thus, alarming the research scope on mithun.

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