

# Clinical Management of Retained Placenta in a Doe: A Case Study

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**Abstract:** Retention of placenta (RP) is one of the major disorder in goats after parturition which cause negative effect on the health and welfare of the farm animals and huge economic losses of the farmers due to treatment expenditure, decrease market value of the animals. The present case study explains about the successful management of Retention of placenta (RP) in a non-descript doe by application of manual traction and other supportive therapies.

**Keywords:** Retained Placenta, Doe, Clinical management.

## 1. Introduction

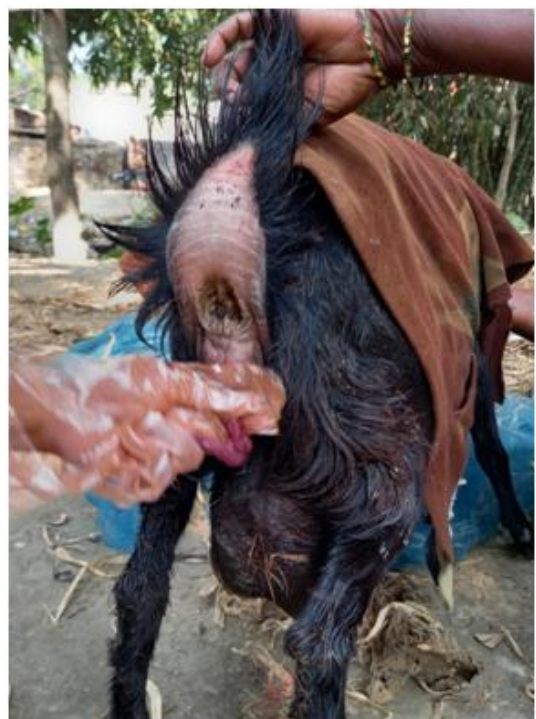
Retention of placenta (RP) is one of the major complications in goats after parturition which effect negatively the health and welfare of the farm animals and causes huge economic losses of the farmers due to treatment expenditure, decrease market value of the animals. Fetal membranes or “placenta” is an essential organ that transfers oxygen and nutrients from the dam to the fetus (Hanafi *et. al.*, 2011). After parturition the placenta normally detaches and falls within short time normally within 1-4 hr after kidding. If the placenta is not expelled within that certain time then it is defined as being retained placenta (RP). In comparison to cattle retained placenta occurs less frequently in goat (Franklin, 1986; Majeed, 2003). In addition to infection of placenta, vitamin and minerals deficiency especially selenium, vitamin E and Vitamin A can cause of retained placenta (Engum and Lyngset, 1970; Roberts, 1985, Hanafi *et. al.*, 2011). Several authors recommended different therapies for treatment of retained placenta including hormonal and manual therapy. In the present case study the retained placenta is successfully corrected by using manual therapy.

## 2. Case history and Clinical Observations

A non-descript doe aged 2 years old with second parity was reported to TVCC, W. U. A. F. S., Kolkata-37, West Bengal with the history of kidding one day earlier and the remnant of foetal membranes hanging from the vulva. The doe had delivered two fetuses by manually, one is alive and another is died. The owner complaint that the doe loss appetite since the day of kidding. The doe was observed to be weak, emaciated, dull and depressed with vaginal bleeding due to incomplete expelled fetal membrane. Physical examination reveals normal temperature, normal heart, pulse and respiration rate. The foetal membrane was seen hanging from the vulva (fig.1) which diagnosed the case as retention of fetal membranes or retention of placenta (RP) where the placenta failed to expel within certain period after the parturition of fetuses.

## 3. Treatment

After intravaginal observation the remnant fetal membrane which was adhered loosely with the uterine tract was removed carefully with gentle manual traction. Then the perineal region and uterine tract was washed with 1% potassium permanganate Solutions to prevent microbial invasion into the uterus. After removal of foetal membrane the doe was treated with injection meloxicam @ 0.5 mg/kg intramuscularly for 3 days to provide anti-inflammatory, anti-exudative, analgesic and anti-pyretic effects, broad-spectrum antibiotic injection Enrofloxacin @ 5 mg/kg intramuscularly for 5 days to prevent current infection and further bacterial infection and mineral mixture[at]10grams orally for 7 days to supply the loss minerals and improve the health condition. Within the following weeks the owner reported that the doe improving health and started to consume normal diet and recovered.



**Figure 1:** Photograph showing the manual removal of retained placenta hanging from the vulva of the doe.



**Figure 2:** Photograph showing the condition after removal of the remnants of placenta.

#### 4. Discussion

Retention of placenta (RP) is one of the major post-partum disorder in farm animals. RP probably less occur in goats than cattle (Franklin, 1986; Majeed, 2003). Although there are several methods to treat the Retention of placenta (RP) i. e. manual and hormonal therapy in cattle and goats (Paisley *et. al.*, 1986; Majeed *et. al.*, 1991; Majeed, 1994) but several studies have not supported the hormonal treatments for RP (Garcia *et al.*, 1992; Stevens *et al.*, 1997, Drillich *et al.*, 2005). The present case study explains about the successfully manual removal of remnant placenta and other supportive therapies to prevent the dire consequences of prolonged retained placenta. In this case RP might be occurs due to improper nutrition supplements during the dry and pregnancy period which causes difficulty in normal delivery of fetuses. In addition to dystocia, hereditary predispositions or infections, vitamin and minerals deficiency especially selenium, vitamin E and Vitamin A can cause of retained placenta (Engum and Lyngset, 1970; Roberts, 1985, Hanafi *et. al.*, 2011) which goes to the current case. There is dystocia history and the emaciated body condition reveals the improper nutrition. At the last it is concluded that proper nutrition supplements and management can sort out the problems of retained placenta in farm animals by improving the health and fertility of animals and reduce the economic losses of farmers.

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