



Prevention of Postpartum Retention of Fetal Membranes In Bovines

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The puerperal period is a critical phase in buffaloes which includes reduction of uterine size, regeneration of the endometrium, elimination of bacterial contamination and resumption of ovarian cyclicity (Sheldon et al., 2008). It is desirable that ovarian activity is resumed as early as possible after parturition. To increase the reproductive performance of the herd, priority should be given to the postpartum period to reduce the interval from calving to conception.

The most commonly used definition of RFM is the presence of fetal membranes 12 hours or more post-partum. If the fetal membranes are not expelled, the risk of infectious such as metritis and mastitis increases. Furthermore, the involution of uterus and resumption of ovarian activity are delayed, fertility impaired and the period between two calving is extended.

The incidence of retained fetal membrane appears to be varying from area to area and from year to year. A higher incidence rate was observed in younger cows than older ones. Aged cows showed a higher incidence (37%) of retained fetal membrane than 4, 5, 6, 7 years old. The number of calving was negatively correlated with the incidence of retained fetal membrane. A higher incidence (44.7%) affected the heifers after their calving while it was 10-13 % after second and third calving, 10-21% after fourth and fifth ones (Majeed et al., 2009). Nutritional status (Body condition score) might also be associated with retention of placenta immediately after parturition since it affects the endocrine status chronically.

The major factor, causing ROP is uterine inertia. Uterine inertia occurs mostly due to hypocalcemia, any dystocia, abortions etc. Nutritional factor like high Iron supplementation in feed can also induce ROP. Decreased blood supply and detachment of placenta from uterine caruncles, these are major events takes place in expulsion of placenta. Uterine contractions aid in decreasing blood supply to caruncles and hence expulsion. Deviation from such mechanism leads to retention of placenta.



There are several methods for prevention retention of fetal membranes.

1. Use of Methyl ergometrine maleate @ 1-3mg I/M immediately after parturition
2. Administration of Calcium boro gluconate @ 450 ml I/V immediately after parturition
3. Administration of Vit – E (150mg/ml) + Selenium (1.7 gm/ml), given 20 ml twice for every 2 weeks and 1 month before expected calving
4. Administration of Inj. Oxytocin @ 60 IU, I/M immediately after parturition.
5. Sometimes combinations like Oxytocin and Calcium borogluconate or Methyl ergometrine maleate and Calcium borogluconate can be used.

Different drugs used for prevention of ROP, not only aid in placental expulsion also helps in early uterine involution.

References

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