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Short Communication

Efficacy of manual removal and parenteral antibiotic therapy for retained foetal membranes in cattle

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ABSTRACT

Retained foetal membrane is an economically important post partum complication in dairy cattle. This study was undertaken to compare the efficacy between manual removal versus non-removal of retained foetal membranes, with parentral antibiotic therapy. Forty crossbred cows which retained the foetal membranes beyond 8 - 12 hours after normal calving, were randomly distributed into two groups. Group I cows were subjected to manual removal and parentral antibiotic therapy and Group II cows were subjected only to parentral antibiotic therapy. In both the groups the nature of lochia, uterine involution and milk yield were assessed once in 48 hours until recovery. There was no significant difference in the duration of uterine involution and milk yield between the groups. Parentral antibiotic therapy without manual removal can be suggested as a choice of therapy for retention of foetal membranes.

Key word : Retained foetal membrane, lochia, uterine involution

Retained foetal membrane is one of the most common and economically important post partum conditions of dairy cattle, resulting in prolonged inter-calving period, reduced milk yield and fertility. Manual removal of retained foetal membrane causes damage to endometrium, suppresses uterine phagocytosis and reduces fertility (Vandeplasche and Bouters, 1982). Systemic antibiotics have been recommended for therapy of retained foetal membranes (Herschler and Lawrence, 1984). Controversy between manual removal and non-removal of retained foetal membranes persist. This study was undertaken to compare the efficacy between manual removal versus non-removal of retained foetal membranes, with parentral antibiotic therapy.

The study was undertaken with 40 crossbred cows, which failed to expel the foetal membranes beyond 8 to 12 hours of calving and presented for therapy to Madras Veterinary College hospital. The cows were randomly distributed into two equal groups. Group I (n=20) cows were subjected to manual removal of the placenta and parentral antibiotic therapy and Group II (n=20) cows were subjected only to parentral antibiotic therapy. Benzathine penicillin @ 48 lakh I.U was given intramuscularly as an antibiotic once in 48 hours until the lochia was mucoid, clear and transparent. In both the groups clinical signs like temperature, appetite, milk yield, lochia and uterine involution were observed at interval of 48 hours until recovery. The uterine position, tone, size and symmetry of the uterine horns were observed rectally to assess uterine involution. The data were analysed statistically by paired 't' test.

The results of the study revealed that the mean duration of post partum uterine involution was 41.9 ± 4.42 days and 40.2 ± 3.36 days in Group I and Group II respectively. There was no significant difference in the duration of post partum uterine involution between the groups, which agrees with the earlier studies of Marion *et.al.* (1968) and Roberts (1971).

The nature of lochia in both the groups was serosanguineous until day 10 post partum. In Group I cows the lochia from day 10 to 20 post partum was scanty and mucoid in 60 per cent, mucopurulent in 20 per cent and mucosanguineous in 20 per cent. In Group II cows it varied from mucoid to mucopurulent which concurs with the report of Bekana *et.al.* (1997).

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In all the cows, there was a reduction in appetite and milk yield upto day 10 post partum, which agrees with the report of Arthur *et.al.* (1995). Marion *et.al.*, (1986) observed no effect of retained foetal membranes on milk production. The transient reduction of milk yield in the present study may be due to the initial reduction in appetite. The failure of appreciable raise in milk yield after day 10 post partum observed in this study could be due to the variation in parity and feeding management of the animal.

Appreciable raise in rectal temperature was not recorded in both the groups. Nasser *et.al.* (1994) reported increase in body temperature between day 2 and 7 post partum due to bacterial toxins. The repeated administration of antibiotics in this study would have reduced the bacterial flora in the uterus that resulted in no appreciable raise in rectal temperature.

Since there was no marked difference in the recovery rate between the groups, parentral antibiotic therapy without manual removal can be suggested as a choice of therapy for retained foetal membranes.

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