

Oxytocin therapy immediately after parturition does not reduce the incidence of retained fetal membranes or improve reproductive performance in crossbred Zebu cows.

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Oxytocin plays a crucial role during parturition and uterine involution. Many pharmaceutical companies recommend the administration of oxytocin to prevent retained fetal membranes (RFM) and improve reproductive performance (RP) in cows. However, there are limited reports to support this approach, and the results are contradictory. The objective of this study was to determine the effect of oxytocin therapy after parturition on the RFM incidence and RP in dual purpose cows under tropical conditions. Five hundred thirty six multiparous, crossbred Zebu cows were randomly assigned to two groups: Oxy (n=280): 30 IU of oxytocin (Pituifral[®] C.A. Laboratorios Asociados, Venezuela) injected i.m. immediately after normal parturition, and again 6 hours later and C (n=256): control. Expulsion of fetal membranes was evaluated 24 hours after delivery. Cows were subsequently inseminated 12 hours after they were detected in estrus. Data were analyzed using proc logistic and GLM (SAS[®], Cary, NC, USA). Oxytocin had no effect on the incidence of RFM (4.6 vs 3.1% for Oxy and C, respectively, $P>0.05$). Cows in Oxy and C had similar conception and overall pregnancy rates (54.0 vs 47.8% and 75.4 vs 73.4%, respectively, $P>0.05$). There were no differences between Oxy and C for calving to first estrus (83.6 ± 3.7 vs 77.2 ± 3.8 days) and calving to conception intervals (113.6 ± 5.0 vs 110.5 ± 5.2 days) anestrus (13.6 vs 13.7%), repeat breeding (21.8 vs 20.7%) and culling rates (15.7 vs 16.4%). Oxytocin therapy after parturition did not reduce the incidence of RFM or improve RP in crossbred Zebu cows under tropical conditions.

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