



RESEARCH
ARTICLE

Reproductive performance and progesterone profile in post-partum suboestrous surti buffaloes

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Abstract : Post-partum suboestrous surti buffaloes of an organized farm confirmed by twice per-rectal palpation 11 days apart from 45 days post-partum were treated with 2 ml (500 µg) of inj. cloprostenol sodium I/M route in first group (n=6) and 2 ml (500 µg) of inj. cloprostenol sodium I/M route along with 5 ml inj. Vit. AD₃E preparation and 15 ml inj. Toldimphos sodium preparation I/M route in second group (n=6) on 55 days postpartum after confirmation of ovarian cyclicity. Six animals of same status were kept as control to see the oestrus induction response and conception rate including evaluation of serum progesterone, just before (0 day) treatment and 24 hr, 48 hr and 72 hr after treatment. The service period and oestrus induction interval in days was found significantly lower in PGF₂α treated (T₁ and T₃) groups as compared to T₂ and control group which clear cut showed the luteolytic effect of PGF₂α on ovaries and earlier resumption of ovarian activities as compared to treatment (T₂) and control groups. Statistical analysis of the data generated in respect of the treatment on the progesterone concentration of the blood serum did not show any significant difference among the four groups of suboestrus surti buffaloes at 0 hr (prior to the treatment) and at 24 hr (post-treatment). Moreover, the mean serum progesterone values at 48 and 72 hr post-treatment between T₁ and T₃ (PGF₂α treated) groups as well as between treatment T₂ (Vit+P) and T₄ group (Control) did not differ significantly. However, the mean serum progesterone levels of T₁ and T₃ (PGF₂α treated) groups differed significantly from T₂ and T₄ groups at 48 and 72 hr post-treatment.

Key words : Suboestrous surti buffaloes, PGF₂α, Progesterone, Postpartum period

How to cite this paper : Rede, A.S., Khasatiya, C.T., Soni, D.K., Patel, M.D. and Chaudhary, S.S. (2016). Reproductive performance and progesterone profile in post-partum suboestrous surti buffaloes. *Vet. Sci. Res. J.*, 7(1) : 48-53.

Paper History : Received : 15.12.2015; Revised : 01.03.2016; Accepted : 22.03.2016