

Induction of ovulation in lactating red deer hinds prior to the breeding season.

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M.W. FISHER, P.F. FENNESSY, J.M. SUTTIE, I.D. CORSON & G.H. DAVIS,  
Invermay Agricultural Centre, Private Bag, Mosgiel, New Zealand.

Methods of inducing ovulation 3 weeks prior to the onset of the breeding season were evaluated in 51 lactating adult red deer. Following 11 days of intravaginal progesterone pretreatment, hinds were either untreated (Control), given 300 IU i.m. PMSG or 500 ng/h s.c. GnRH (by osmotic pump). All hinds were laparoscoped 7 days later to record the presence or absence of an induced ovulation. Ovulation was observed in 0/13 Control, 11/13 PMSG and 8/13 GnRH treated hinds indicating that methods of inducing ovulation previously demonstrated in non-lactating hinds, are similarly effective during lactation. To investigate the role of FSH in the induction of ovulation, a further two groups were given 1.5 mg FSH-P 24 and 0 hours before progesterone withdrawal, with (FSH + GnRH), or without (FSH), GnRH treatment. Ovulation was recorded in 2/7 FSH and 4/5 FSH + GnRH group hinds.

These results indicate that gonadotrophic stimulation probably in the form of both LH and FSH is required to induce ovulation in a large proportion of lactating hinds prior to the normal onset of the breeding season.