Effects of exogenous gonadotrophins at farrowing on incidence of ovulation

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Abstract

Shorter lactation lengths are causing concerns for piglet health and welfare. For longer lactation lengths to be achieved, a commercially viable way to uncouple the event of weaning and oestrus is required. The use of exogenous gonadotrophins as an easily applied management of lactational oestrus has yielded inconsistent results. The aim of the present study was determine if the timing of postpartum injection of human chorionic gonadotrophin (hCG) had an effect on the incidence of ovulation. As well as documenting follicular and corpora lutea changes during the immediate post-partum period.

Sows were injected with 1000IU hCG at approximately 24 h (n = 16) or 48 h (n = 18) post farrowing. All sows were subjected to transrectal ultrasound examination of their ovaries at 0, 24, 48, 72 and 96 h post farrowing. Sows in the 48 h group also received a scan at 120 h. Blood samples were taken on day 10 for progesterone concentrations to confirm if ovulation had taken place.

Ovulation experienced during early lactation was 33% and 22%, for 24 h and 48 h respectively. Of the 9 sows that were thought to have ovulated only 6 had elevated progesterone levels.

Post-partum ovulation rates were not significantly affected by the timing of the hCG injection.