PROFILE OF PROGESTERONE LEVEL FOLLOWING TREATMENT USING PROSTAGLANDIN F$_{2\alpha}$ IN MARE DIAGNOSED WITH CORPUS LUTEUM CYST

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ABSTRACT

The purpose of this research was to know the profiles of progesterone level following treatment Prostaglandin F$_{2\alpha}$ in mare as having corpus luteum cyst. The samples have been used in this researched was blood serum. Ten mare racehorse that had been used in this research from 3 to 6 years old. Mare racehorse were used that the result of crossing a female horse offspring of G3-G4 with a thoroughbred stud. The blood samples collected before Prostaglandin F$_{2\alpha}$ injection, 24 hours, 48 hours and 72 hours after injection Prostaglandin F$_{2\alpha}$. The progesterone concentrations was analyzed using a competitive ELISA technique. Means (+SD) of progesterone levels before Prostaglandin F$_{2\alpha}$ injection and 24 h, 48 h, 72 h after injection were 4.97 ± 2.7 ng/ml; 1.25 ± 1.0 ng/ml; 0.65 ± 0.7 ng/ml; dan 0.05 ± 0.1ng/ml. Result of this study showed that the Prostaglandin F$_{2\alpha}$ were able to reduce the progesterone level up to 74.8% within 24 h; 86.9% within 48 h and up to 98.9% within 72 h, respectively. In conclusion, Prostaglandin F$_{2\alpha}$ is able to reduce the progesterone level at mares as having corpus luteum cyst gradually.

Keywords: mare, corpus luteum cyst, prostaglandin F$_{2\alpha}$, progesterone