Pregnancy Dependence on Ovarian Progesterone in the Camel

(Camelus dromedarius)

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Abstract

The corpus luteum of pregnancy persists throughout the length of gestation in the dromedary camel and thus it is assumed that the ovarian progesterone is mandatory throughout gestation in this species. The objectives of this study were to test the assumption that maintenance of the pregnancy state is dependent upon ovarian progesterone throughout gestation in the dromedary camel. Thirteen parous, 10-11 months pregnant camels were used. The female camels were divided randomly into three groups. Group 1 animals (3) were control. Group II animals (7) were ovariectomised. Group 3 animals (3) were ovariectomised and received daily subcutaneous injection of 100 mg progesterone powder prepared in sesame oil for 60 days. Jugular blood samples were taken in heparinised syringes before and after ovariectomy throughout the experimental period and plasma was obtained and stored at -30°C until analysed for progesterone and oestradiol-17β by radioimmunoassay. Removal of the ovaries containing corpora lutea in group II was immediately followed by abortion or premature birth. The chronic administration of progesterone succeeded in maintaining pregnancy with normal gestation length. However, fetal viability in the group maintained on progesterone was lower than in the normal controls.