**Use Milk Progesterone Profile for Determine some Ovarian Activities in Dromedary Camel Farming System**

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**ABSTRACT:** this study was conducted to assay milk progesterone profile as new approach for monitoring estrus cycle onset and ovarian activity in she-camel under farming system during four months postpartum. Eight she-camels of kenana breed were selected immediately after calving and assigned to two equal groups, Group (GY) and (GD). Group early lactation (Gy) included she-camels in first and second parity, whereas, group mid lactation (Gd) involved she-camels, in third, fourth and fifth parity. Both groups of she-camels were managed together at the same environmental conditions under intensive system, they herded in closed pen at Alzakiat Camel Farm, Bahri City in Khartoum State. We allowed the calves to suckling freely their dams for first month postpartum of both groups of (Gy) and (Gd) then milk replacer should be used after first month of calving after that calves must be used for milk letdown then refer to their pens. Collection of milk samples started in the second week of postpartum and continued biweekly interval up to end of 4th month postpartum then sent to central laboratory of Khartoum University for analysis. Radioimmunoassay (RIA) was used to determine milk progesterone concentration of each group. Results showed regular fluctuation of Milk progesterone profile during four months of postpartum of (Gd) compared to (Gy). Whereas, significantly there's decrease of progesterone at 4th week for Gd (1.46 ng/ml) compared to Gy (4.72 ng/ml). This indicated that the first estrus onset and ovarian activity were appeared in Gd compared to Gy. At the end of experiment the pregnancy rate for Gy versus Gd was 0:1. The study concluded that first estrus onset and regular secretion of progesterone was observed of mid lactation she-camel compared to early lactation.**Keywords:** Dromedary, Ovarian, Postpartum, Progesterone, Radioimmunoassay