

ANALYSIS OF GLYCOSIDASE ACTIVITIES, STEROIDS HORMONES CONCENTRATIONS AND SELECTED BIOCHEMICAL PARAMETERS IN SERUM OF DROMEDARY CAMELS (*Camelus dromedarius*) DURING FOLLICULAR PHASE AND PARTURITION

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ABSTRACT

In the current study, blood samples were collected from 18 camels during the follicular phase and 9 camels at parturition. The obtained sera were used for estimation of glycosidase activities, steroids hormones concentrations and selected biochemical parameters in dromedary camels during follicular phase and parturition. The current findings indicated that the activities of β -N-acetylglucosaminidase and α -N-acetylgalactosaminidase increased significantly during parturition compared to that during follicular phase. α -L-fucosidase activities remained comparable in both phases. The serum concentration of progesterone, cortisol and prostaglandin F2 α increased significantly during parturition compared to that during the follicular phase. However, oestradiol 17- β decreased significantly during parturition compared to that during the follicular phase. The serum concentration of nitric oxide, alkaline phosphatase, cholesterol, creatine kinase, glucose and magnesium decreased significantly during parturition compared to that during the follicular phase. The activities of AST and the concentrations of calcium and phosphorus remained comparable in follicular phase and parturition. In conclusion, the current study indicated that there is a difference in glycosidase activities, steroids hormones concentrations and some biochemical parameters in serum of dromedary camels (*Camelus dromedarius*) during follicular phase and parturition.

Key words: Camels, follicles and steroids, glycosidase, hormones, parturition