

CEREBROSPINAL FLUID COLLECTION AND ITS ANALYSIS IN CLINICALLY HEALTHY DROMEDARY CAMELS (*Camelus dromedarius*)

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ABSTRACT

Seven apparently healthy camels (4 males and 3 females) aging 4-9 yrs. old were investigated in the study. Blood samples for serum biochemical analysis were collected from the jugular vein under asepetic condition after animals being clinically examined. Each camel was then sedated with an intravenous injection of 2% xylazine hydrochloride. CSF samples were withdrawn from the atlanto-occipital articulation. Lateral radiographs of the neck were obtained while the needle was *in situ*. Eighteen biochemical parameters were determined both from the serum and CSF of each camel. Most of CSF tested parameters were extremely significant in comparison to serum parameters. CSF parameters had lower concentration of all the studied parameters than the serum, except for the sodium and chloride. The mean value of sodium (150.3 ± 1.70 mmol/l) and chloride (114.5 ± 1.49 mmol/l) in CSF were significantly ($P < 0.03$) higher than their mean values in serum; 154.5 ± 0.92 mmol/l and 131.3 ± 2.5 mmol/l, respectively. Gender had no relevant effect on the most CSF measured parameters.

Key words: Atlanto occipital, camel, cerebrospinal fluid, CSF sampling, serum