Plasma Biochemistry Values in Wild Hawksbill Turtles (Eretmochelys imbricata) during Nesting and Foraging Seasons in Qeshm Island, Persian Gulf

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Abstract : Normal reference ranges of biochemical parameters are considered important for assessing and monitoring the health status of sea turtles. For this means, serum biochemistry determinations were analyzed in normal adult nesting and foraging hawksbill turtles (Eretmochelys imbricata). Blood samples were collected in March-April during nesting season and December-November in the foraging season. Plasma biochemistry values, except for creatinine and lipase were significant between the two periods. FBS, cholesterol, triglycerides, ALP (alkaline phosphatase), AST (aspartate aminotransferase), bilirubin, total protein, LDH (lactate dehydrogenase), CK (creatine kinase) and amylase were significantly higher in nesting season than foraging season (P<0.05). On the other hand urea, ALT (alanine aminotransferase) and albumin in the nesting season were significantly lower than foraging season (P<0.05). It was concluded that the nesting E. imbricata showed significant variation in their biochemical profile due to reproductive output. This study has produced working reference intervals useful for hawksbill turtles for future conservation and rehabilitation projects in the Persian Gulf and may be of assistance in similar programs worldwide.

Keywords : plasma biochemistry, nesting, foraging, hawksbill turtles, Persian Gulf

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