

Studies On The Haemolytic Complement Of The Dromedary Camel (*Camelus Dromedarius*). I. Classical Pathway Haemolytic Activity In Serum.

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Abstract:

Classical pathway haemolytic complement (CPHC) of the dromedary was assayed under standardised conditions. A total of 14 indicator systems of red blood cells (RBC) and haemolysins were investigated. Highest CH50 titre was obtained with rabbit RBC sensitised with goat haemolysin. Among the factors investigated were: ionic strength, Mg²⁺, Ca²⁺, ethylenediaminetetraacetic acid (EDTA) concentration, pH, incubation time and temperature. The standard system of titrating the HC levels consisted of rabbit RBC sensitised with goat haemolysin, sucrose veronal buffer (SVBS) pH 7.4, ionic strength 0.14 M and Ca²⁺ and Mg²⁺ concentrations of 4.0×10^{-4} M and 1×10^{-3} M, respectively. Incubation at 37 degrees C for 120 min gave the highest HC activity. Using these standardised conditions HC levels were determined in 79 camels aged between 3 months and 15 years. Highest mean HC value of 873 +/- 26.6 CH50 units ml⁻¹ were recorded in the age group of 1-5 year old camels and the lowest mean HC value of 598 +/- 120.8 CH50 units ml⁻¹ in the age group of 10-15 year old camels. Adult males in the age group 5-10 years had significantly higher mean HC levels than their female counterparts (P < 0.0001).