

Abstract:

Plasma proteins are known to comprise about 6-7 g/dl (Eckersall, 2008). Functionally, plasma proteins are involved in nutrition, maintenance of osmotic pressure, buffering acid-base balance, transport of smaller ions and molecules, haemostasis and protective effect of the immune proteins (Eckersall, 2008). Many of these plasma protein change markedly in diseases (Abate et al., 2000; Rasouli et al., 2005) and with age (Keay and Doxy, 1982; Chaudhary et al., 2003). Capillary electrophoresis of serum proteins (CE) is an established and effective method which has been used as a screening tool for the clinical diagnosis of many diseases in humans (Jellum et al., 1991; Giiy-Benile et al., 2003) and animals (Caniacho Est et al., 2005). Normal serum proteins electrophoretic patterns are composed of five fractions, albumin, α -globulin, β -globulin and γ -globulin (Eckersall, 2008). Therefore, the clinical interpretation of CEP is based on the variation in the content of one or more of these five major fractions. However, species differences between the animals have been observed by Keay and Doxy, (1982). Therefore, the aim of the study was to validate the use of CE in camels and to determine the normal serum protein capillary electrophoretic pattern in relation to the age and sex.