

ANTIGENIC COMPONENTS OF *Echinococcus granulosus* HYDATID CYST FLUID FROM DROMEDARY CAMELS (*Camelus dromedarius*)

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ABSTRACT

This study is designed to investigate the components of hydatid cyst fluid (HCF), the larval stage of *Echinococcus granulosus*, that acted as antigens during infection in dromedary camels and to identify the antigenic fractions specific to this metacestode. Hydatid cysts were obtained from an infected slaughtered camel in Al-Ahsa central abattoir, Kingdom of Saudi Arabia. Crude antigen extract was prepared from hydatid cyst fluid (HCF). SDS-PAGE fractionation of HCF on 7-20% acrylamide gel revealed 11 protein fractions when stained by Commassie blue stain. The molecular weight of these fractions ranged from ~180 to 22KDa. Western immunoblotting against serum from the camel infected with hydatid cyst identified 4 antigenic components of molecular weight of ~180, 55, 48 and 22KDa. Reaction with sera collected from camels with parasitic infections other than *E. granulosus* and from healthy camels free from parasitic infections failed to identify any antigenic component of HCF apart from one component of 58kDa with serum from camels suffering from mixed infection of *Nematodirus* and strongyle worms. The rest of antigenic components identified by HCF infection serum seems to be specific to this larval stage.

Key words: Dromedary camels, electrophoresis, *Echinococcus granulosus*, hydatidosis, immunoblots