

Seroprevalence Study of Cystic Echinococcosis and Its Associated Risk Factors in Fars Province, Southern Iran

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Abstract : Background and Purpose: Cystic echinococcosis, caused by the larval stage of *Echinococcus granulosus*, is a common parasitic infection of humans and is endemic in many parts of the world, including Iran. So that, one percent of those admitted to surgery departments are hydatid cyst patients, and using the ELISA method, the infection rate has been reported in different regions of Iran from 1.2% to 21.4%. Therefore, the aim of this study was to investigate the seroepidemiology of human hydatid cysts in Fars province, southern Iran, by ELISA method. Methods: In this cross-sectional study, 600 serum samples of persons who were referred to the laboratory of Nemazi Hospital in Shiraz for normal tests were examined for the presence of specific Anti-IgG antibodies to hydatid cysts by ELISA method. During the sampling, a structured questionnaire was used to obtain social data of individuals with determinants of risk factors for Cystic echinococcosis. Finally, the results of the ELISA test, along with demographic information completed by individuals, were analyzed using SPSS software. Results: The average age of the subjects in this study was 40.01 ± 9.166 . The prevalence of hydatidosis was reported as 5.66% (34/600). The disease was more in the age group of 21-30, people living in villages, working in rural areas, and people with a history of other parasitic diseases. Statistically, a significant difference was observed between the prevalence of the disease and two risk factors, contact with dogs (OR= 0.042; 95%CI: 0.014-0.12; P= 0.001) and washing vegetables with water (OR= 0.08; 95%CI: 0.011-0.56; P= 0.012). Conclusion: The present study showed that hydatid cyst disease has a significant prevalence in this area. Also, based on the results, contact with dogs and not properly washing vegetables are two important factors of disease transmission.

Keywords : *Echinococcus granulosus*, Cystic echinococcosis, hydatid cyst, Fars province

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