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Prevalence and Intensity Study of Hydatidosis in Slaughtered Sheep in Arak (Summer 2016)

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Abstract

The infection of food animals to hydatid cyst is a concern from economic and public health stand points. Hydatidosis caused by Echinococcus granulosus is still an important public health and economic problem in many regions of the world, especially in countries with insufficient hygienic m anagement system. This is a zoonotic disease without a specific clinical signs. Final diagnosis in animal can be made only by necropsy or/and post mortem inspection. In this survey, the prevalence of hydatid cysts was studied in 7235 Sheep slaughtered at the abattoir in Arak. Samples from 467 cases (6.45%) were infected to hydatid cysts. The infection rates of lung and liver were 136 cases (29.1%) and 272 cases (58.2%), respectively, while each heart and kidney samples, 6 case (1.3%) was found infected. Also, 115 Sheep (24.6%) were infected both in lung and liver. The maximum cysts in the infected lungs and livers were 24 and 19, respectively. The minimum cysts in lungs and livers was 1. In the only case, related to heart and kidney, there were 2 and 4 cysts respectively. Considering the prevalence rate, the results obtained from the statistical analysis did not show any significant difference between male and female sexes, whereas a significant statistical relation was observed between the age of Sheep and the prevalence rate ($p<0.05$). The age group above 5 years showed the highest level of infection. In this survey, there was no significant difference in the intensity of infection to hydatid cysts in males comparing to that of females. But a significant difference was found between the intensity of infection in age groups below 5 months and the ones above 1 years ($p<0.05$). In conclusion, the results revealed high infection to hydatid cyst in Iranian Sheep, so more attention of related control organizations seems to be needed.

Key Words: hydatid cyst, Sheep, abattoir, Arak.