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Prevalence of hydatidosis in livestock in Chakwal District of Pakistan

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ABSTRACT Background: Hydatidosis is a zoonotic parasitic disease and a serious human and animal health problem in many endemic areas of the world. It is caused by the tapeworm parasite of *Echinococcus granulosus sensu lato*. This parasite is endemic in the neighboring countries like China, Iran and India. There are limited studies on CE in Pakistan. **Methods:** This study primarily aimed to determine the prevalence of hydatidosis in slaughtered livestock in Chakwal district (Chakwal, Bhaun, Kallar kahar, Choa saidan shah and Balkasar) from June to December 2015. The livestock were inspected after slaughtering and the ages, breeds and organ wise prevalence were recorded. **Results:** A total of 6 095 animals (sheep, goat, buffaloes and cattle) of different genders, ages and breeds were inspected after slaughtering. Overall prevalence was 8.55% (88/1 045) in sheep followed by 8.42% (88/1 045), 6.90% (4/58), 2.99% (138/4 608) in cattle, buffaloes and goats, respectively. Liver wise prevalence was 7.75%, 6.90%, 0.06%, 1.30% in cattle, buffaloes, goats and sheep, respectively while lung wise prevalence was 7.55%, 0.67%, 0.00%, 0.00%, in sheep, cattle, buffaloes and goats, respectively. Male (9.50%) were more infected than female (1.96%) in all hosts. Breed wise prevalence was higher in desi breed of cattle followed by crossbreed and other breeds. In goats, teddhi breed was more infected than beetal while in sheep Afghani breed was more infected than the others. Cattle of 6-9 years groups were more infected than 0-3 and 3-6 years age groups. Buffaloes of the only age group of 6-9 years were infected while in goat and sheep 3-6 years were more infected than 0-3 years. According to the statistical analysis there was a significant difference ($P < 0.05$) in prevalence of hydatidosis when ages, genders and organs were compared. **Conclusion:** The hydatidosis is a serious parasitic problem in the study area for livestock. The disease should be monitored on regular basis in other areas of Pakistan and future studies should be carried out to explore the real prevalence in Pakistan.

Keywords: Hydatidosis; Livestock; Chakwal; Pakistan

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