

Comparative Study of Albendazole and Oxfendazole in Treatment of Cystic Echinococcosis in sheep and goats

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Date: 2005

Abstract

The objective of this study was to compare the efficacy of two drugs, albendazole and oxfendazole in treatment of cystic echinococcosis using naturally infected sheep and goats. Fifteen (15) animals with natural infections of cystic echinococcosis were randomly selected into 3 groups of 5 animals each. Two groups were treated orally with either albendazole or oxfendazole at 30mg/kg body weight twice a week for 4 weeks while the third group served as controls. Ultrasound and post mortem examination of the animals, and microscopic examination of proto scolices for eosin dye exclusion and flame cell motility were used to determine the efficacy of the two drugs. Ultrasound examination revealed that 4 animals in the albendazole group and 3 in oxfendazole group had decreased cyst viability ($P < 0.05$). There were no changes in identifiable cysts of control animals. Microscopic examination showed that 60.9% (14/23) of the cysts from albendazole group had dead protoscolices compared to 93.3% (14/15) and 27.3% (3/11) for oxfendazole and control groups respectively. There were no significant differences between the effect of either albendazole or oxfendazole between sheep and goats. In the present study, oxfendazole has a higher efficacy (93.3%) than albendazole (60.7%) when administered at the same dosage rate (30mg/kg-body weight) and for the same period (twice weekly for 4 weeks). Based on the findings in this study, oxfendazole seems promising as an alternative drug for treatment of cystic echinococcosis. **KEY WORDS:** cystic echinococcosis; albendazole; oxfendazole; sheep; goats.