

ECHINOCOCCOSIS IN TURKANA DISTRICT, KENYA

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Turkana district in Kenya has the highest reported incidence of human hydatid disease in the world. The causative agent is *Echinococcus granulosus*. The domestic dog is the main definitive host. Although the domestic cycle has been shown to be most important a sylvatic cycle with wild carnivores as the definitive host is also known to exist.

Several hypotheses have been advanced to explain the high incidence of human hydatidosis in Turkana District. One is that man acts as an intermediate host due to lack of burial or burial in shallow graves where the corpses are easily exhumed by dogs. Probably, the most important factor is the close contact between the Turkana and their dogs. The most important role dogs play is as nurse maids to pre-toilet trained children. The use of dog faeces in various traditional medicaments is also a suspected contributor.

Possible control measures are being investigated in pilot studies. These include an education campaign teaching the life cycle of the parasite and the dangers of keeping unwanted dogs. Songs composed in the local dialect are used as part of a community based health care programme. The education campaign is hampered by the low literacy rate among the Turkana people. Dog registration and dosing using praziquantel are also carried out. However, these measures have proved difficult to implement. Dosing is expensive and following the nomadic Turkana and their dogs is not easy. Dog control by either shooting or baiting is a socially unacceptable option. Dog treatment to reduce infection is another possible control measure. Albendazole has shown some promising results. Reducing dog infection by preventing dogs eating infected offal from ruminants will also be important but is ineffective at present.

Control rather than eradication is the immediate goal. Turkana District bounds Ethiopia, Sudan and Uganda which complicates control efforts. Both southern Ethiopia and the Karamoja district of Uganda are known endemic foci of hydatid disease. Cattle and small ruminants are constantly moving between these areas and Turkana.

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