

ABSTRACT

Title: EPIDEMIOLOGY AND NEW MANAGEMENT OF THE HYDATIC CYST IN THE REGION MEKNES TAFILALET

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Cystic echinococcosis (CE) is a neglected parasitic zoonosis with considerable socioeconomic impact on affected pastoral communities. CE is endemic throughout the Mediterranean, including Morocco, where the Mid Atlas is the most prevalent area for both human and animal infection. The highest hospital annual incidence of human CE is recorded in the provinces of Ifrane and El Hajeb. However, hospital-based statistics likely underestimate the real prevalence of infection, as a proportion of cases never reach medical attention or official records.

Methodology/Principal findings

In 2012, a project on clinical management of CE in Morocco was launched with the aims of estimating the prevalence of human abdominal CE in selected rural communes of the above-mentioned provinces using ultrasound screening and training local physicians to implement ultrasound-based focused assessment and rational clinical management of CE according to the WHO-IWGE Expert Consensus. A total of 5367 people received abdominal ultrasound during four campaigns in April-May 2014. During the campaigns, 24 local general practitioners received >24 hours of hands-on training and 143 health education sessions were organized for local communities. We found an overall CE prevalence of 1.9%, with significantly higher values in the rural communes of Ifrane than El Hajeb did (2.6% vs 1.3%; $p < 0.001$). CE cysts were predominantly in inactive stage, especially in older age groups. However, active cysts were present also in adults, indicating acquisition of infection at all ages. Province of residence was the only risk factor consistently associated with CE infection.

Conclusions/Significance

Our results show a high prevalence and on-going, likely environmental transmission of CE in the investigated provinces of Morocco, supporting the implementation of control activities in the area by national health authorities and encouraging the acceptance and divulgation of diagnosis and treatment algorithms based on imaging for CE at both national and local level.