Hydatid disease (echinococcosis), caused by the tapeworm Echinococcus, is a public health and economic problem of global proportions. Treatment of this zoonotic infection usually requires major surgery and the prognosis for some forms of the disease is poor. Control efforts have had little impact globally and new foci of infection and regions of endemicity have recently been recognized. However, in addition to its medical, veterinary and economic significance, Echinococcus is an intriguing biological phenomenon.

This book presents a complete synthesis of all aspects of Echinococcus and Hydatid Disease. It builds on the success of a previous volume The Biology of Echinococcus and Hydatid Disease by Allen & Unwin, 1986, and details the major advances that have taken place since. In addition, the scope of the book has been broadened to include genetics, evolutionary biology, epidemiology and clinical features. The overriding theme of the book is that a comprehensive understanding of the biology of Echinococcus is essential for the effective treatment and control of Hydatid Disease. The links between laboratory knowledge and field applications are emphasised throughout the book. Consequently, research workers, teachers and students of parasitology, clinicians and field workers, will find this work an indispensable source of information, but it will also provide a model for the integration of basic and applied research in parasitology.

Publication Type: Book
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Publisher: CAB International

Human echinococcosis is a zoonotic disease (a disease that is transmitted to humans from animals) that is caused by parasites, namely tapeworms of the genus Echinococcus. Echinococcosis occurs in 4 forms: cystic echinococcosis, also known as hydatid disease or hydatidosis, caused by infection with Echinococcus granulosus; alveolar echinococcosis, caused by infection with E. multilocularis; polycystic echinococcosis, caused by infection with E. vogeli; and unicystic echinococcosis. The disease often starts without symptoms and this may last for years. The symptoms and signs that occur depend on the cyst's location and size. Alveolar disease usually begins in the liver but can spread to other parts of the body, such as the lungs or Cystic echinococcal disease (Echinococcus granulosus). Indirect hemagglutination (IHA), indirect fluorescent antibody (IFA) tests, and enzyme immunoassays (EIA) are sensitive tests for detecting antibodies in serum of patients with cystic disease; sensitivity rates vary from 60% to 90%, depending on the characteristics of the cases. Crude hydatid cyst fluid is generally employed as antigen. At present, the best available serologic diagnosis is obtained by using combinations of tests. In: Thompson RCA, Lymbery AJ, editors. Echinococcus and hydatid disease. Wallingford, UK: CAB International; 1995. p. 355-410. Treatment Information.