

Cystic Echinococcosis

Clinical presentation

The clinical presentation depends on the localization of the cysts. *E. granulosus* metacestodes preferentially develop in the liver (>70%) and secondly in the lungs (20%). The 'European' G7 genotype of *E. Canadensis* appears to almost exclusively develop in the liver (98.6%).

Initial symptoms

In a considerable number of patients, CE is an incidental finding during imaging examinations made for other reasons. Typically, cysts do not induce clinical symptoms until they have reached a particular size. In liver Echinococcosis Patients sometimes are presenting with abdominal pain, dyspepsia, fever or allergic manifestations, including a rash. In case of rupture to the biliary tree, there are signs of cholangitis and/or bile duct obstruction. Lung cysts can be associated with chest pain, chronic cough and hemoptysis, atelectasis or pneumonia. Peritoneum and other organs like spleen, kidneys, bone, heart, or ZNS are rarely affected (<1% of cases) and can cause organ-specific symptoms.

Clinical course and therapy options

A structured stage-specific approach to CE management, based on the World Health Organization (WHO) ultrasound classification of liver cysts, is recommended. Management options generally include percutaneous sterilization techniques, surgery, drug treatment, a 'watch-and-wait' approach or combinations thereof. Experience of the center with treatment modalities plays a role for good outcome. In many cases, patients treated at University Hospital of Zurich show excellent results with treatment by surgery and concomitant drug for 3 months as standard care.

Follow up

All treatment plans for CE should include long-term patient follow-up to detect changes in the cyst and possible relapses. During the first year post treatment, we recommend clinical follow up a blood check as well as imaging at least two times a year. If the patients' condition appears to be stable, imaging follow up intervals can decrease after three years post treatment to once a year or every two years for at least 10 years.