

P0101

Paper Poster Session I

Focus: Echinococcus

Cost of surgery for abdominal cystic echinococcosis. Single-centre experience from 2008 to 2014

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INTRODUCTION: Human cystic echinococcosis (CE) is a chronic, complex and neglected zoonosis with a global distribution. Its clinical spectrum ranges from asymptomatic to severe infection. Rarely, the disease can even be fatal. Four approaches in clinical management exist: surgery, percutaneous techniques, drug treatment for active cysts, and the "watch and wait" approach for inactive cysts. Allocation of patients to these treatments should be based on cyst stage, size and location, available clinical expertise and comorbidities. However, clinical decision algorithms, efficacy, relapse rates, and costs have never been properly evaluated. Data on the cost of surgery for CE is scant, making comparison with costs of non-surgical treatments impossible.

OBJECTIVES: To evaluate in detail the cost of surgery for abdominal CE in a referral center for echinococcosis in Northern Italy.

MATERIALS AND METHODS: Patients operated for abdominal CE in the Department of Surgery of our Hospital from January 2008 to June 2014 were enrolled prospectively. Clinical history, duration of hospital stay, type of surgical interventions, detailed costs of the features listed above and of administrative duties were recorded.

RESULTS: Overall costs recorded range from 5.874 - 23.721 € (Figure 1). This includes the costs of intervention (1.768 - 4.445 €), hospital stay, administered drugs, pre and post-intervention examinations.

DISCUSSION: CE is a complex disease due to differences in number, dimensions, location, stage of cysts and presence of complications, which explains the range of possible treatments and the wide variability of costs. Previous studies on the economic burden of CE calculated direct costs based only on DRG (Diagnosis Related Groups) using itemized prize (Mastrandrea et al. 2012). To our knowledge, this is the first study that details actual costs of surgery for abdominal CE in a Western country.

CONCLUSIONS: According to the indications of the WHO Informal Working Group on Echinococcosis, surgery for liver CE should be limited to complicated cysts. However, most centers still tend to treat all liver cysts with surgery irrespective of their stage and lack of complications. Here we evaluate for the first time the detailed cost of surgery for abdominal CE and offer a glimpse into the savings that could be obtained with a stage-specific approach to abdominal CE. This type of study should be replicated in both developed and developing countries with a high burden of CE and with different healthcare systems to obtain a clearer picture of the global monetary costs of CE.