Reviewer's report

Title: Survey of childhood empyema in Asia: Implications for detecting the unmeasured burden of culture-negative bacterial disease

Version: 1 Date: 19 February 2008

Reviewer: Itzhak Brook

Reviewer's report:

This is an impressive collection of data from 4 different countries and provides interesting and important information. However, the lack of specific data weakens the interpretation of the result. We are not told if pneumonia was also present in the children. The lack of differentiation between pleural effusion from non infectious causes and empyema also weakens the study.

Mandatory

The names of each hospital that participated in the study need to be given. In order to assess the accuracy of the data the authors need to describe the methods of collection and type of cultures taken in each hospital. Was there any uniformity, were cultures processed routinely for anaerobes (properly) taken, and were fungal, mycobacterial and parasites looked for? The high rate of negative cultures may be due to the previous administration of antibiotics or presence of fastidious organisms such as anaerobic bacteria. There is a high yield of anaerobes if proper cultures are taken.( Brook I. Microbiology of empyema in children and adolescents. Pediatrics. 1990;85:722-6). We are not told if antibiotics were given prior to specimen collection and if there was correlation between negative results and this.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

'I declare that I have no competing interests'