Reviewer's report

Title: Epidemiologic Study of Aseptic Meningitis in Daejeon, Korea (1987 through 2003)

Version: 1 Date: 9 May 2005

Reviewer: Marc Van Ranst

Reviewer's report:

General

This study by Kyung-Yil Lee et al., describes a retrospective epidemiologic study on a rather large number (N=2201) of medical records of children hospitalized with aseptic meningitis in the city of Daejon in South Korea. This is a nice study, and provides a lot of references to Korean papers that are not otherwise available in MedLine.

The weak point of the paper is that only a few enteroviruses in the cerebrospinal samples from the patients were genotyped. However, the paper is on 'aseptic meningitis' and not on enterovirus meningitis.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The paper should be revised by a native English speaker. There are many spelling and grammatical errors that distract from the otherwise interesting study.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

Recently, another paper on aseptic meningitis patients from South Korea (Seoul) was published in Intervirology (Joo CH, Ahn J, Seo I, Kim YK, Kim D, Hong H, Lee H. Characterization of nonpolio enteroviruses recovered from patients with aseptic meningitis in Korea. Intervirology. 2005 Mar-Jun;48(2-3):97-103). Although only a few isolates were genetically characterized, it would be nice to include this work in the reference list.


Discretionary Revisions (which the author can choose to ignore)

In 2002, the second-largest outbreak of aseptic meningitis coincided with the 2002 FIFA World Cup soccer which was hosted by Korea and Japan. The Daejeon Stadium hosted two first round matches, as well one second round game (12 June 2002: South Africa 2:3 Spain; 14 June 2002: Poland 3:1 U.S.A. and 18 June 2002: Second round match - Korea Republic 2:1 Italy). Hundreds of thousands spectators and their viruses from three continents were in the city. The authors could speculate that this might have been a potential etiological factor, although without enterovirus genotyping, this can never be proven. Maybe it would be interesting to look at the exact timing of the
2002 epidemic, i.e. to see if the peak of the meningitis epidemic came a couple of weeks after the World Cup games in Daejeon? It would be interesting to see if the echovirus 13 samples that the authors identified in 2002 were phylogenetically related to enteroviruses from one of the visiting countries.

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

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** No

**Declaration of competing interests:**

I declare that I have no competing interests