Reviewer's report

Title: Azithromycin treatment failure in a case of bacteremia due to Salmonella enterica Paratyphi A

Version: 1 Date: 22 April 2014

Reviewer: Robert-Jan Hassing

Reviewer's report:

Major Compulsory Revisions:

Comment 1
This is an interesting case of azithromycin treatment failure in a patient with a Salmonella enterica Paratyphi A infection. In this paper the authors refer to another publication about treatment failure due to possible azithromycin resistance (MIC >16 mg/L). To my opinion a different problem should be discussed in this paper; namely treatment failure in an infection with a wild type/“susceptible” isolate. This case report could be of more interest if the author would expand more on this issue. For example, isn’t it questionable that some guidelines, in the case of a Salmonella infection, advise to treat a bacteremia caused by a Gram-negative organism with an oral bacteriostatic drug? Elaborate more on the clinical studies performed with azithromycin: which dosages are used in these studies? How many studies are comparable with your treatment (500 mg daily/80 kg)? (Girgis NI et al. Antimicrob Agents Chemother. 1999, Butler T et al. J Antimicrob Chemother. 1999, Parry CM et al. Antimicrob Agents Chemother. 2007, Chinh NT et al. Antimicrob Agents Chemother. 2000, Dolecek C et al. PLoS One. 2008). Since all of these studies are performed in endemic countries, where the need for an oral drug in the treatment of enteric fever is high, the authors could discuss more if the conclusions of these studies also apply to an ill returned traveler in a developed country like Japan.

Comment 2
The authors should confirm the MICs of azithromycin with a reference method (broth- or agar-dilution method). It is known that E-test results may not be congruent with reference dilution test results.

Minor Essential Revisions:

Comment 3
Line 63: S. Paratyphi B and C are also possible causative pathogens of enteric fever.

Comment 4
Line 110: Since the authors refer to reports from clinical trials, the word efficacy
should be used instead of effectiveness.

Discretionary Revisions

Comment 5

Line 100: Did the patient have any signs of cholelithiasis or other biliary tract abnormalities (for example, did you also perform a CT scan together with the FDG-PET)?

Comment 6

Line 125: We recently published the MIC distribution of 354 typhoidal Salmonella isolates of ill returned travelers collected during 1999-2012 in the Netherlands (Hassing RJ et al. Emerg Infect Dis 2014). In this case series a minority of the S. Paratyphi A isolates showed an MIC of 8. This reference can be used as an example of azithromycin MIC distribution in travelers.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
'I declare that I have no competing interests'