Reviewer's report

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

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Reviewer: Jan Jacobs

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Case Report: Azithromycin treatment failure in a case of bacteremia due to Salmonella enterica Paratyphi A.
Kobayshi Tetsuro et al.

- Major Compulsory Revisions

1. Well-documented cases of Salmonella Paratyphi A resistance to azithromycin are rare as are clinical treatment failures with azithromycin are rare too, reason why this report is interesting. Of note – the authors could mention the report of Fernando (Pathogens and Global Health, 2012; 106: 366-368) as an additional case next to the report of Molloy and co-workers (authors’ reference 13). However, I have concerns whether this case represents a relapse versus treatment failure (see 2).

2. Clinical failure occurred with an isolate at a MIC of 8 mg/l, which is, as the authors describe, within the range that is considered effective (EUCAST), and failure occurred after full treatment with ceftriaxone. This means that other reasons for treatment failure such as “conventional” relapse (approx. 10% of patients with enteric fever) should be exploited and microbiological data should be confirmed.

- What is the clinical significance of the thickening intestinal wall of the colon on the PET scan?
- Have there been other investigations done to rule out deep-seeded infections (abscesses, aortitis…)
- Has the azithromycin MIC value been confirmed by a reference laboratory?

In conclusion, the considerations that (i) the patient has a recurrent bacteremia after ceftriaxone as well as azithromycin, (ii) (for the moment) absence of deep-seeded infections has not been well documented and (iii) the dose of azithromycin was sub-optimal, make me conclude that the Title “Azithromycin treatment failure” goes beyond the key-message of this paper, i.e. relapse after
(too low dose) treatment of paratyphoid fever.

I suggest to re-work the case report:
- A more appropriate title could be “…relapse under azithromycin treatment”,
- The Discussion and the Abstract should refer to the issue of correct dosage of azithromycin in typhoid fever
- Comments above (better description/more evidence about of ruling-out of deep-seeded infection; microbiological confirmation by reference laboratory.

- Minor Essential Revisions
  1. Strictly speaking, the genus name “Salmonella” cannot be abbreviated in the case of serovar name (Salmonella Paratyphi and Salmonella Typhi).
  2. Abstract line 58: infections (add “s”)
  3. L80: “Blood culture were positive…”: replace by “Blood cultures grew with Gram-negative rods which were…”
  4. L93: “less sensitive”: replace by “showed decreased susceptibility to”
  5. L94: Biomérieux
  6. L97: delete “test”
  7. L104: “was negative”: replace by “yielded no growth”
  8.L122: replace “subspecies” by “serovars”

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

**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.