Reviewer’s report

**Title:** Resection of a methicillin-resistant Staphylococcus aureus liver abscess in a patient with Crohn’s disease under infliximab treatment: a case report

**Version:** 3 **Date:** 26 November 2012

**Reviewer:** Nickolaos Michalopoulos

Which of the following best describes what type of case report this is?: Unexpected or unusual presentations of a disease

Has the case been reported coherently?: Yes

Is the case report authentic?: Yes

Is the case report ethical?: Yes

Is there any missing information that you think must be added before publication?: Yes

Is this case worth reporting?: Yes

Is the case report persuasive?: No

Does the case report have explanatory value?: No

Does the case report have diagnostic value?: No

Will the case report make a difference to clinical practice?: No

Is the anonymity of the patient protected?: Yes

Comments to authors:

This is a well-written manuscript describing a case of MRSA liver abscess treated successfully with major hepatectomy. The clinical course of the patient emerge some serious questions that must be answer by the authors.

Major points.

1. The authors describe a patient with hepatic abscess at severe sepsis (fever>40°C, WBC>20400 /µL, slightly liver function impairment). The authors should describe the status of blood pressure (MAP), the heart rate and if other organs impairment was presented at the clinical course.

2. If the patient was hypotensive they should describe the resuscitation treatment.
3. The authors declare that the first blood culture was negative and the culture of the abscess revealed MRSA infection. Did they perform other blood cultures? Did they repeat the culture of the abscess cavity? Was another bacteria isolated during the clinical course? The authors should be addressed exhaustively in these questions.

4. The authors must describe the method by which the bacteria (MRSA) identification was carried out.

5. The initial antibiotic therapy after MRSA isolation was vancomycin 1g/day. The authors must refer the MIC of vancomycin. According to MIC the dosage of the agent alters. Another important issue is if MIC is >1mg/L or even more >2mg/L. Generally vancomycin is inappropriate in high MICs. How many days the patient received vancomycin before alter to teicoplanin?


6. Teicoplanin is also a glycopeptide (like vancomycin) and teicoplanin MICs is often common with vancomycin MICs. Why the authors change the therapy to teicoplanin? Teicoplanin has limited role in severe MRSA infection (like in this case) and is not superior from vancomycin. Moreover teicoplanin require 2-3 days to reach a therapeutic plasma level making her role inappropriate in acute infection or progressive infection (like this case). Why the authors did not use another agent like daptomycin or linezolid? How many days the patient received teicoplanin prior surgery?

7. The author must clear out if after the MRSA isolation antibiotic therapy includes only vancomycin and teicoplanin. Since the most persuasive theory of liver abscess origin is intestinal bacteria (Crohn disease) and intestinal infections are usually polymicrobial, the authors should justify their decision to treat only MRSA.

8. According to the manuscript the patient deteriorate even after the second drain (12F) was placed prior surgery. The authors should describe exhaustively the status of the patient prior surgery. Was the patient in septic shock?

9. Treatment of patient with severe sepsis is complicated. Crucial points are adequate source control, proper antibiotic therapy and prompt resuscitation measurements. The antibiotic therapy in this patient seems inappropriate and the authors did not describe resuscitation therapy. Source control especially in patient with septic shock should be made minimally invasive as author described by drain placement and in selected cases with aggressive surgical interventions. Even this patient had a good outcome after major surgery the authors should justify more convincingly their decision.

**Quality of written English:** Acceptable
Declaration of competing interests:

I declare that I have no competing interests