Reviewer's report

Title: Extensively drug resistant tuberculosis in a high income country: A Report of four unrelated cases.

Version: 1 Date: 2 July 2007

Reviewer: Franz Allerberger

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General
The submission by Blaas et al. presents 4 cases von XDR TB observed in Germany. The manuscript is written in a clear and concise manner and is recommended for publication after some minor changes. The authors should comment on whether or not these are the first cases reported in the literature for Germany. They should be careful about the terms used for describing the ethnicity of the 4 patients. In the ABSTRACT it says “… from Eastern Europe and Russia…” [is Russia (at least the western part) not belonging to Eastern Europe?]. In RESULTS and Table 1 it says: Georgia, Russia (twice), and former Yugoslavia. These three countries should be listed also in the Abstract. It might be interesting to know whether the patients were real immigrants or asylum seekers.

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

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

Being not an English native speaker myself, I recommend also a person fluent in English to have a second look at the following topics:

ABSTRACT:
Background, line 3: … patients infected by …. or infected with?
Results: Instead of “All patients were treated for tuberculosis for several years and …” I propose: Patients received stationary treatment against XDR TB for 11 months, 4.5 years and twice for 6 years.”
Conclusion: second to the last line: “…. outcome and the expense of medical resources.” I propose: … outcomes and the total cost.” Instead of “All efforts to prevent ….” I recommend to use “All reasonable efforts …”.

INTRODUCTION:
Second sentence: “Recently, reports of strains with XDR TB …. It should read “… strains from patients with extensively drug resistant tuberculosis (XDR
TB)…”, i.e. the abbreviation must be spelled out, as it is its first use (except ABSTRACT).

Fifth to the last line: it must read mortality instead of mortality rate (mortality per definition is a rate); I personally would prefer “case fatality ratio”.

Second to the last line: please use “microbiology laboratory” instead of microbiologic laboratory.

METHODS:
Second to the last line of page 3: “.. resistance against INH …” or “resistance to INH”.

Last line: “For case number 4, where …” should read, “… number4, the only case for which information on cost of in- and outpatient treatment was available, such data are reported.”

RESULTS:
Sixth line: … amikacin (AM) (HOW MANY PATIENTS ??) or kanamycin (17 patients), and capreomycin (8 patients).

Ninth line: Instead of “These XDR TB isolates were detected during 1998-2003”. it should read: “These XDR TB isolates were cultured from samples gained from 1998 to 2003.”

Line 12: “All patients were treated for TB for several years …..” Here (and also in ABSTRACT) one should clearly differentiate between treatment for TB, treatment for MDR TB and treatment for XDR Tb.

Last words on page 4: maybe “repeatedly” instead of several times?

Pages 5 and 7: For cases 1, 2, and 4 the authors use the term “Caucasian”. I recommend to avoid this term, as the meaning may be understood quite different by different readers. For persons trained in the US, Caucasian is a synonym for “white-skinned” as opposed to belonging to a minority. Europeans may use it for somebody from the Caucasus. For instance in patient no. 1: are we talking about a native Georgian or an immigrant from a neighboring Caucasian republic east of Georgia? Also later, page 7, patient 4: what is a Caucasian diagnosed with TB in Russia ( a Russian citizen or a citizen of a neighboring Caucasian republic?)

Line 11, page 5: The meaning of “Due to the wide resistance and limited options at that time…” is not quite clear: limited options for what?, broad resistance?

Third to the last line, page 5: “.. including 9 months of RMP monotherapy”. Please explain (or commend on) why monotherapy was given.

Page 6: “linezolid 600 mg bid. 2 months ….” Start new sentence with “Two months…..” Why are doses, dosing intervals and duration of treatment only provided for linezolid? This might be interesting information, that could be presented in one of the tables.

Line 15: “Oral antituberculous therapy with…. [name drugs, doses] was continued …”

Line 4, page 7: “.. and an intermediate result for RMP in 1992..” what is an
intermediate result? a result documenting intermediate susceptibility?

DISCUSSION:

First sentence: “Resistance of M. tuberculosis …. with a high and rapid mortality was presented.” please delete rapid (mortality is a rate, and what is a rapid rate?). Please use case fatality ratio instead of rapid “mortality”.

Third sentence: “Epidemiologic data published ….. showed an increase of XDR TB….“ please use: “showed an worldwide increase of XDR TB…”. Instead of “The observed decline of MDR isolates in the recent years may be ….“ please use “The observed decline of MDR isolates in Germany in the recent years ….“.

Page 9, 6th to the last line: please write M. tuberculosis in italic.

Page 9: Concerning patient 4: are there any subtyping data available to answer the question whether or not patient 4 had a mixed infection of two unrelated strains or his mixed infection was due to one strain with two resistance patterns?

Last sentence: “Therefore, all reasonable efforts …” instead of “Therefore, all efforts ….”.

Discretionary Revisions (which the author can choose to ignore)

What next?: Accept after minor essential revisions

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