Reviewer's report

Title: Case Report: shock septic from multidrug resistant descending necrotizing mediastinitis - intensive multimodal approach IgM enriched immunoglobulins and Polymyxin B hemoperfusion

Version: 2 Date: 06 Dec 2017

Reviewer: Tibor Fulop

Reviewer's report:

The manuscript improved tremendously, just a few thing left to correct:

-some spelling errs persist - e.g.: HOEMODINAMIC; Sistemic; "form a peripheral intensive care unit"; Colestin; Tigecicline [latter two: need English spelling, not Italian!]; Direct hemoperfusion (small "d" to write); FEVER (change to "temperature")

Several other terms incorrectly capitalized with upper case letters, e.g.: Blood Flow, Lipopolysaccharide; Rehabilitation Institute, Lipoteichoic acid, intensive care unit

"Lactate 10mg/dl (normal range < 9mg/dl)" -- needs correction - lactate is usually mM/L, normal range appears incorrect

Pentaglobin - list manufacturer, please

avoid directly identifying brand name only: explain in parentheses what "Vigileo" is [in method/patient description section]

Some odd wording needs corrections

-"made an wrong diagnosis of pneumonia" -- to "with incorrect diagnosis of pneumonia"

-"had a large and hot swelling in left side: -- to "large and warm mass on the left side of the neck"

-"such lesion appeared liquid with contextual aerei nuclei;" -- to: "appeared to be a liquefied with areas of air pockets" (??)

"medical therapy, so, on hold of the result of endotoxin" - to "...failed conventional surgical and medical therapy and in light of elevated endotoxin level..."
"to treat a false pneumonia" - to" for treatment of incorrectly assumed pneumonia"

Two relatively important issues to be clarified:

1. One other unusual thing about the case - the author do not mention, whether acute kidney injury (AKI) or fluid overload was taking place. I would have expected this person to have developed severe renal failure with such a hemodynamic embarrassment - in which case most of us would have (also) contemplated renal replacement therapy. Any info on that.

2. During polymixin-B cartridge treatment - still bacteremic or not? (does the cartridge happen to kill bacteria also when passing through the filter??)

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