

Answering reviewers.

Dear reviewers,

First of all, thank you for reviewing my menu script. Your comments have been very helpful to me.

I will tell you about the parts you suggested to me.

#1.

1. Lemierre's syndrome refers to combination of bacteremia and suppurative thrombosis of the vein close to the focus of infection. Typical and original syndrome (as authors mentioned) was described with pharyngitis and adjacent IJV thrombosis. Atypical Lemierre's syndrome has also been described such as liver abscess with pyelophlebitis (<https://pubmed.ncbi.nlm.nih.gov/31993242/>) and porto-mesenteric suppurative thrombosis due to perforated appendicitis (<https://pubmed.ncbi.nlm.nih.gov/26793462/>). presence of pneumonia and acute PE can possibly be named atypical LS, however renal vein thrombosis doesn't make much sense as it is not in the proximity of the infection. If patient had pyelonephritis than suppurative renal vein thrombosis can be argued to be part of LS. hence, I suggest the authors focus on pneumonia and PE and to remove the emphasis from renal vein thrombosis

: We agree with your opinion and have deleted the photo and emphasis on renal vein thrombosis.

2. Authors have not reported hypercoagulability work up. before this can be attributed to LS, basic hypercoagulability work up (factor V leided, protein C level, protein S level, APL antibodies etc) should be reported

: As you said, I thought it was necessary and added it.

The hypercoagulability test showed decreased protein S activity and less free protein S antigen but normal total protein S antigen, protein C activity, and protein C antigen. The von Willebrand factor and factor V Leiden were normal, and lupus anti-coagulant level was

批注 [A1]: All abbreviations should generally be expanded at their first use. Further, an abbreviation need not be introduced if it has not been used subsequently in the same section (Abstract, main text, or figure legend).

elevated. However, anticardiolipin and anti- β 2 glycoprotein-1 antibodies were absent.

Additionally, the following findings were noted: prothrombin time, 14.5 s; antithrombin III, 72.1; D-dimer, 2.01; and fibrinogen, 926.1. These results did not meet the diagnostic criteria for disseminated intravascular coagulation

批注 [A2]: This is the SI unit symbol.

批注 [A3]: Please provide the appropriate units here.

批注 [A4]: Please provide the unit.

3. Definition of LS is repetitive and it should be mentioned only once in introduction section

: The content was repeated. So I mentioned only once in introduction.

4. Discussion would be much more interesting if authors compare and contrast hypercoagulability properties of *F. necrophorum* and *K. pneumoniae* as it related to pathogenesis of the syndrome. Please see above mentioned references

: I hadn't thought about this before, but it was interesting and thank you for your comments.

We added content by finding and comparing several references. Thank you again.

F. necrophorum produces a component of the cell surface called hemagglutinin, which forms thrombi. Russo et al. have suggested that this is because *K. pneumoniae* causes more frequent metastatic spread in the K1/K2 group. Another possibility is increased capsule production in the hypervirulent type.

Although the hypothesis has not been tested, it appears that the mucoviscosity of the strain's thick capsules persists in the bloodstream and causes greater aggregation of bacterial cells to form thrombi.

#2.

1. Did you test for ketosis or proteinuria? I.e. did patient had diabetic ketoacidosis? or background diabetic nephropathy

: For Ketosis, additional tests were not possible at the time, and there was a quantitative test for proteinuria, so the content was added. As a patient with diabetes, I think there is a possibility of diabetic nephropathy.

2. Empirical Piptazo and Levofloxacin is to cover what bacteria? is this as per local antibiogram?

: They were used to simultaneously manage *Streptococcus pneumoniae* and *Pseudomonas* spp., the causative agents of severe community-acquired pneumonia. These antibiotics were selected based on previous reports of fluoroquinolone combination therapy leading to a better prognosis than β -lactam alone in severe cases

3. Clarify if amphi was switched to itraconazole - you mention itraconazole switched to amphotericin?

: There was a typo in the sentence and it has been corrected. We changed amphotericin to per oral itraconazole.

4. I would expect you to discuss role antibiotic stewardship teams / infection control teams in your ICU or hospital?

: Since the patient was a severe case from the visit, antibiotics were prescribed in cooperation with the infectious disease medical staff until discharge.

5. There are too many images, can reduce atleast 1 image or make it as miniature inset in other image.

: Figures have been reduced to four.

6. Do you have a pathology / microscopic photo of aspergillous? if so would be good.

: No photos were obtained for Aspergillus.