Reviewer's report

**Title:** Absence of inferior vena cava in 14-year old boy associated with deep venous thrombosis and positive Mycoplasma pneumoniae serum antibodies- a case report.

**Version:** 2  
**Date:** 12 November 2014

**Reviewer:** Shogo Hayashi

**Reviewer's report:**

Absence of inferior vena cava (AIVC) is a very rare variation, which by itself has enough value to be reported. However, the authors' presentation does not seem to show sufficient informations. Because my specific area is anatomy and thus I have only superficial knowledge on infectious disease and immunology, please validate prospectively that the most of following comments are limited to AIVC.

**Major Compulsory Revisions**

**Background:**

1) This section seemed to be too detailed. Note the instruction for authors, which said: "This section should include a short literature review, and should end with a very brief statement of what is being reported in the article."

2) ll.62-64 The frequency of AIVC which the author described seems to be too high. I suppose it might be of a total extent of IVC malformations. At least, the reviewer couldn't find such description in Reference [1].

3) ll.93- The authors' case is not "Background". The whole content of this paragraph should be discussed in Conclusion section.

**Case presentation:**

4) l.122-124. The area in which the IVC was absent was not clearly shown in Fig. 1. In general cases of AIVC, the confluence of the common iliac veins (i.e. the lowest part of IVC) was associated with the lumbar and azygos venous system, however these veins were not drawn. The possibility is concerned that this case was not AIVC but only the IVC obstruction by thrombosis. In addition, As described in the reference below (and numerous articles on IVC variations), it is well-known that the developmental origins of the IVC were deferent at the levels of renal veins and iliac veins, the drainage of renal veins should be made clear. Finally, the authors should add the figures of multi-slice CT and/or 3D-CT angiograms from other directions.

5) ll.125-127 The authors should stated how they confirmed the venous drainages and collateral circulation with these images. e.g. when there was collateral to the mesenteric vein, why shouldn't the portal system should be enhanced?

**Conclusions:**
6) This section should be rewritten comprehensively. As stated in Information for Authors: "Summary illustrations may be included.", the schemes is desired to explain the anatomy and embryological development of AIVC in this case.

Reference

Minor Essential Revisions
Abstract:
7) l.30 M. pneumonia should not be used without explanation. In addition, the name of bacterium should be put in italics.
8) l.39 Add period after 'walk'.
9) ll.40-41 '... additional tests a boy ...' > '... additional tests, the boy ...'
10) l.44 'Mycoplasma' should be abbreviated.

Background:
11) l.65 IVC should be abbreviated separately from AIVC.
12) l.75 LMWH must be explained.

Case presentations:
13) l.135 As previously mentioned, LMWH should be explained before.
14) l.138 & l. 146 'Mycoplasma' > 'M.'

List of abbreviations:
15) l.169- The all abbreviations should be listed.

Discretionary Revisions
Abstract:
16) l.47 'is' > 'became' may be more suitable. This description may not be necessary, though.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

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.