Reviewer's report

Title: Portal vein thrombosis after aortic valve replacement surgery in a patient with antithrombin III deficiency - Case report and review of literature

Version: 2 Date: 23 March 2014

Reviewer: Ken Kesler

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Minor essential revisions

1. The patient apparently developed lower extremity edema along with ascites, which lead to the diagnosis. The lower extremity edema is also mentioned in the discussion section as linked to portal vein thrombosis. One question that probably deserves a little explanation is how does lower extremity edema lead to a suspicion the diagnosis of portal vein thrombosis?

2. In the discussion section the authors also state, “…without prompting diagnosis and intervention, the portal vein pressure will be increased and eventually lead to fatal massive GI bleeding…. Certainly fatal GI bleeding is one potential outcome after portal vein thrombosis along with other complications such as liver failure but fatal bleeding is probably not a forgone outcome as suggested in the manuscript.

3. How did the authors manage anticoagulation immediately after mechanical valve replacement and did their management in this particularly patient differ from their normal routine? Apparently there was some clue to heparin resistance during cardiopulmonary bypass so mention of specifics of their management such as on what postoperative day warfarin was begun, was heparin used, should be provided.

4. The title suggests there is a literature review however the manuscript appears devoid of any previous reports of such complication.

Level of interest: An article of limited interest

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

Declaration of competing interests:

I declare that I have no competing interests