Reviewer's report

Title: Intrarenal arteriovenous malformation following flexible ureterorenoscopy and Holmium laser stone fragmentation: Report of a case

Version: 1 Date: 11 Nov 2018

Reviewer: Bodo E. Knudsen

Reviewer's report:

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Overall an interesting case report that presents a very rare complication of URS and laser lithotripsy, namely the development of a pseudoaneurysm. In addition the patient suffered from a perinephric and retroperitoneal hematoma.

The authors should provide a more detailed description of the operative procedure as it may provide some insight into what occurred. Items to include should be:

1. Size and length of access sheath - how far up the ureter was the sheath positioned? Was there outflow of fluid noted during the procedure?

2. Type of guide wires used

3. How was irrigation managed - gravity, pressure bag, single action pump, etc? Were any measures taken to ensure low pressures during the case? Even with the use of a ureteral access sheath high pressures can be reached in the kidney.

4. Laser - short or long pulse duration?

5. How long was the procedure?

6. Type of anesthesia - if general was an endotracheal tube or a laryngeal mask used? Paralysis?

The development of the perinephric hematoma and retroperitoneal bleed suggests the a perforation could have occurred during the procedure, such as from a guide wire. Was there any evidence of this? It also suggests that high intrarenal pressures may have been reached.
It would be helpful to discuss these items in the Discussion. The authors should include a section that discusses "best practices" to reduce the risk of complications. ie. low pressure, clear vision, careful passage of guidewires to avoid perforation, etc

Why was aspirin stopped preoperatively? In a patient with medical co-morbidities stopping his aspirin may increase his risk of other medical complications after surgery. Aspirin is consider safe during ureteroscopy based on multiple prior publications

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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