Reviewer’s report

Title: Bilateral Ureteropelvic Rupture Following Blunt Injury: a case report

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Bilateral Ureteropelvic Rupture Following Blunt Injury: a case report

The authors present a case series of a 29 y/o male who with delayed diagnosis of bilateral urethral injuries. The authors’ study is important as it highlights the importance of clinical suspicion and adherence to recommended steps in the evaluation and management of blunt abdominal trauma. I believe that this article should be published with minor revisions. My comments are listed below:

Case Presentation: The authors' mention that a “whole body, contrast-enhanced CT” was performed. The most important information for the reading audience is whether or not the initial CT scan included 10 minute delayed images. Is the systolic blood pressure from the injury scene available? The authors' mention the patient was in "preshock". Do they have the systolic blood pressure from the injury scene? Given the patient’s clinical history of blunt abdominal trauma and shock (initial SBP < 90 mmHg), the recommended guidelines would be a CT scan with delayed images to evaluate for renal vascular or collecting system injury1.

The seatbelt sign and ejection from the automobile are also important clinical indicators for a deceleration injury in which either a UPJ injury (shear injury) or renal artery injury (dissection of the arterial intima resulting in an AAST grade V injury) could occur. As such, 10 minute delayed images and an arterial CT phase are important to diagnose a UPJ injury and renal artery injury, respectively.

Discussion: I disagree with the authors’ statement that if they had overlooked the bilateral ureteral injuries, “he may have had to undergo bilateral nephrectomy.” This is too bold of a statement. An absence of urine production in this case of bilateral ureteral injuries allowed diagnosis. If the patient had a unilateral UPJ injury, the diagnosis could have been masked if he/she were asymptomatic and had a normal contralateral kidney that was making urine. Prompt review of the images by the authors’ did allow surgical repair to be done in the first 36 hours. Delay of diagnosis > 7-10 days would have likely resulted in bilateral nephrostomy tubes with delayed repair in 3 months.

The importance of gross or microscopic hematuria is not an accurate predictor for UPJ injury, as 50% of patients with such an injury will not have evidence of hematuria2. This finding should be mentioned by the authors'.

Conclusion: The grammar in the first sentence requires editing. I would re-state
the importance of following AUA guidelines as mentioned the below referenced article. Following the recommendations would have allowed the diagnosis to have been made earlier.


**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 have no competing interests.