

## Peer Review File

Article information: <http://dx.doi.org/10.21037/tau-20-926>.

### Reviewer A

**Comment 1:** Abstract and paper: your study population is 87 patients, since 13 of 100/105 has been excluded due the absence of the variable APF, which is critical for the study.

### RESPONSE:

We thank the reviewer for the comment. The surgeon did not record APF in 13 out of 100 patients. The last paragraph of the DISCUSSION now states: **Thirteen out of 100 patients had no APF recorded** (line 231, page 11).

**Comment 2:** In the table 1, I see an important missing. The postoperative surgical complications must be numbered and detailed, in my opinion. You include the intra-operative complications. But not the post-operative. But successively (table 4 and text) you correlate the postoperative with APF, and not the intraoperative.

Moreover, you had 45 postoperative complications, and 6 of them are Clavien 3-5 complications. It is important to detail the type of complication (hemorrhagic? Urine fistulas? Infections? Medical as myocardial infarction or AF?) because they relate differently to APF. It is critical to separate Grade 5 complications from others, due to their importance. Please, expand Table 1 including type and grade of complications.

### RESPONSE:

We thank the reviewer for the comment. The reviewer raises a great point with regards to postoperative complications. The classifications of postoperative complications have now been included in Table 1. Also, in the RESULTS section (line 126, page 6) we state: **Table 1 outlines the patient demographics and surgical outcomes of the cohort. In our cohort, 6 patients (7%) had major complications (Grade III-V). Grade III complications included an infection requiring drainage. Grade IV complications include hyperkalemia, anuria, acute respiratory failure and encephalopathy. The grade V complication was a death secondary to cerebellar stroke.**

**Comment 3:** you found a very strong connection between APF and male gender. Hypertension and not BMI had a significant correlation with APF. It would be very interesting to correlate APF with the level of serum testosterone of patients, or with the Metabolic Syndrome (e.g. as defined by the NCEP-ATP III), which resulted correlated in some papers (e.g. this DOI: 10.23736/S0393-

2249.20.03698-X).

**RESPONSE:**

We thank the reviewer for the comment. The reviewer raises a great point with regards to the correlation between APF and the level of testosterone in male patients and/or with metabolic syndrome. Unfortunately, we do not have patients' testosterone levels.

**Comment 4:** I would remove the correlation between APF and its two "components" in the end of table 3, since it seems self-evident.

**RESPONSE:**

We thank the reviewer for the comment. You are correct, this is self-evident. **We did remove stranding and posterior fat from table 3.**

**Comment 5:** Table 4: why "conversion from laparoscopic nephrectomy " is included? What does it mean? Maybe the open access achieved a difficult nephron sparing technique, previously scheduled as RADICAL laparoscopic nephrectomy?  
Please, explain.

**RESPONSE:**

We thank the reviewer for the comment. Sorry for the mistake. This was a typo. **It has been removed from Table 4.** There were no laparoscopic partial nephrectomies in this cohort. All the patients in this study were open partial nephrectomies.

**Reviewer B**

The authors analyzed the validity of MAP score to predict APF in OPN. The authors concluded MAP score is a useful tool to predict APF and perioperative outcomes.

**Comment 1:** During the study period of 11 years, technical details of the operative procedure have not changed in OPN? How was the impact of the change in technical details? Ischemic technique (no clamping, warm ischemia, cold ischemia), renorrhaphy technique...

**RESPONSE:**

We thank the reviewer for the comment. We now describe technical details of the operative procedure in the first paragraph of the MATERIALS AND METHODS section (line 71 page 4): **OPNx was performed by a single fellowship trained surgeon at one institution via subcostal incision. The kidney was fully mobilized in each case to ensure safe hilar access and identification of the ureter. The perinephric fat was dissected to the renal capsule to allow adequate exposure of the renal tumor. An ultrasound probe was utilized to mark out the margins of the tumor prior to excision. The hilum was controlled using bulldog clamps and the tumor was excised. Disruptions in the collecting system were closed with a running absorbable suture and renorrhaphy was performed using the sliding-clip technique prior to removal of hilar clamp. Warm ischemia time is defined as the time of renal artery clamp placement until clamp removal from the renal vein. There were no alterations in technique over the study period.**

**Comment 2:** ‘conversion from laparoscopic nephrectomy’ in table 4 is ‘conversion to laparoscopic nephrectomy’ or ‘conversion from laparoscopic partial nephrectomy’? 60-64% seems high compared with other reports.

**RESPONSE:**

We thank the reviewer for the comment. Sorry for the typo. **It has been removed from Table 4.** There were no laparoscopic nephrectomies performed in the cohort. All the patients in this study were open partial nephrectomies.

**Reviewer C**

Congratulations to the authors for the important paper.

**Comment 1:** Hypothesis missing - Include before the objectives.

**RESPONSE:**

We thank the reviewer for the comment. Hypothesis was added in the second to last sentence of the INTRODUCTION section (line 63 page 3). **We hypothesize an association between MAP score and the presence of intraoperative APF in patients undergoing open partial nephrectomy (OPNx).**

**Comment 2:** IRB number is missing

**RESPONSE:**

We thank the reviewer for the comment. IRB number was included in the 5<sup>th</sup> paragraph of the MATERIALS AND METHODS section (line 94, page 5). Following Institutional Review Board (**IRB # 20-008079**) approval.

**Comment 3:** The authors studied open surgery. Why the authors do not include laparoscopic and robotic surgery? In your institution there are only open surgeries? Please comment.

**RESPONSE:**

We thank the reviewer for the comment. In our institution we do perform laparoscopic and robotic surgery. However, we analyzed them independently. In the past we published an article correlating MAP score and intraoperative adherent perinephric fat in patients undergoing robotic assisted partial nephrectomy. The first paragraph of the INTRODUCTION now states: **The Mayo Adhesive Probability (MAP) score is an accurate image-based nephrometry scoring system to predict the presence of APF during robotic assisted partial nephrectomy (RAPN) (1).**

**Comment 4:** The paper has several limitations (specially the sample size) as the authors shows at the end of discussion section - What is the contribution to the urological literature of this paper in authors opinion? The inclusion of robotic surgery patients is important?

**RESPONSE:**

We thank the reviewer for the comment. As we published before, MAP score is associated with the presence of APF in patients undergoing RAPN (reference 3) with this paper we can see that these results can be extrapolated to patients undergoing OPNx. We believe that the contribution this paper makes to the literature is to show that MAP score will accurately predict the presence of troublesome adherent perinephric fat in open partial nephrectomy as well as robotic partial nephrectomy.

**Comment 5:** Include in your references the papers below:

Lee H and Colls - Int Braz j Urol 2018

Deng H and Colls - Int Braz J Urol 2020

**RESPONSE:**

We thank the reviewer for the comment. We added the two papers in our references as follow

Lee H - Int Braz J Urol 2018 a sentence was included in the 4<sup>th</sup> paragraph of the DISCUSSION as **reference 21**, (line 223, page 10): **Further studies should be conducted in order to identify additional factors that aid in the prediction of the presence of intraoperative APF in patients undergoing partial nephrectomy (21).**

Deng H – Int Braz J Urol 2020 a citation was added to the first sentence of the DISCUSSION as **reference 9**, (line 174, page 8) Nephron sparing surgery is an alternative treatment for small

localized renal masses with variable postoperative outcomes (9).

**Comment 6:** Put the tables 1 and 2 together.

**RESPONSE**

We thank the reviewer for the comment. We think that these two tables have a lot of important information that could be missed if we put them together.