

Peer Review File

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Review Comments

Reviewer A

This review successfully summarized the past and current endoscopic management for upper urinary tract carcinoma. Although the manuscript is well-written, there is one point that should be addressed.

Reply 1: We thank the Reviewer for their suggestions to improve our work.

In lines 187-188, the authors said that there is no study comparing the different laser types, but in reference No. 30, Yoshida et al. compared CW Tm: YAG + Ho YAG vs Ho: YAG alone in terms of oncological outcomes. Thus, please revise the sentences and Table 2, as appropriate.

Reply 2: The Reviewer makes an excellent point; we have removed the referenced sentence from the text entirely.

Reviewer B

Comment 1: Need to list understaging and under grading rates of UTUC biopsy (lines 63-73). Biopsy technique results should be discussed.

Reply 1: In accordance with the Reviewer's suggestion, we have modified the text to include the reported rates of understaging and undergrading.

Changes in the text: (Lines 123-125) "Subiela et. al. conducted a meta-analysis in 2020 and found that the rates of undergrading and understaging were 32% (95% CI 25-38%) and 46% (95% CI: 38-54%), respectively (19)."

Comment 2: Need objective data to describe scope improvements (lines 85-90).

Reply 2: We appreciate the Reviewer's observations and agree that highlighting objective data would be beneficial for the reader of the review. We have added the suggested objective findings.

Changes in the text: (Lines 147-149) "Dragos et. al. performed in-Vitro study of nine flexible ureteroscopes and found mean difference of 21 degrees in end tip deflection favoring fiberoptic scopes (25)."

Comment 3: Table 1 should review the large retrospective studies for each laser modality (tumor sizes, grade/stage, recurrence, etc)

Reply 3: The Reviewer makes an excellent point. Table 2 lists large and contemporary studies involving each laser modality. We have made changes to Table 2. Table 2 is now organized by type of laser and is reflective of the different lasers described in Table 1.

Changes in the text: Table 2 updated by laser type.

Comment 4: Overall, this is a weak narrative review of this topic. There is extensive literature in this realm that focuses on biopsy limitations, techniques and progress. In regards to endoscopic laser therapy, there is a lack of objective evidence within its comparisons among modalities. Lastly, JELMYTO and other installations should also be discussed in this topic.

REPLY 4: We wish to thank the Reviewer for their interest in our work and their thoughtful suggestions to improve our work. Accordingly, we have updated the review to include objective evidence as outlined in a point-by-point fashion to comments 1-3 above. We do agree there is extensive literature on endoscopic biopsy limitations, techniques and progress which was outside the scope of our review. Further, we appreciate the Reviewer's observation that JELMYTO was not discussed in this topic. However, instillations are to be covered in a separate article in this series, thus were not included in this work.

Reviewer C

I read your review article with interest.

You gave a good overview of the types and systems of ureteroscopes, the types and characteristics of lasers, and the outcomes of endoscopic treatment for UTUC in clinical practice.

It seems to me that your article is suitable for publication in this journal.

Sincerely.

Reply 1: We appreciate the reviewer's enthusiasm and feedback on our work.

Reviewer D

Comment 1: In this article, the Authors report on the laser therapies and new technologies in the endoscopic management of upper tract urothelial carcinoma. The authors resume state-of-the-art of endoscopic management without reporting the "Methods" section (is this a systematic review or a narrative one?).

Reply 1: We wish to thank the Reviewer for their time and interest in our work. The Reviewer point is well taken. This is a narrative mini-review as requested by the Editor. We have updated the methods to state this plainly.

Changes in the text: (LINES 89-97) "A comprehensive literature review was completed using PubMed to create this narrative mini review. Publications from peer-reviewed journals written in English between 1987 to 2022 were reviewed. The time period reviewed commenced with the year the first article on the endoscopic management of UTUC was published. Search terms included "upper tract urothelial carcinoma," "UTUC," "management," "treatment," "ablation," "endoscopic," "ureteroscopic," "Thulium," "Holmium," and "Neodymium." The studies were reviewed by two authors (AM and RP) for appropriateness of inclusion."

Comment 2: Line 65: no reference is provided (would suggest these PMID: 32935620 and PMID: 27611622).

Reply 2: We thank the Reviewer for suggesting excellent references and have updated the text to include the references as above.

Changes in the text: (LINES 118-120) “Diagnostic ureteroscopy is a fundamental tool in selecting patients for endoscopic management (16). It allows for precise determination of the location, appearance, size and focality of lesions, not readily identifiable on CT urogram (17).”

Comment 3: Although this review may be have a didactic purpose, some novel conservative treatments for UTUC are not reported (example: thulium fiber laser, mitogel instillations).

Reply 3: We appreciate the Reviewer’s concern, and the point is well taken. We have updated the discussion of the thulium laser to explicitly discuss the thulium fiber laser. However, Novel treatments (ie. Mitogel) are outside of the scope of this review and will be covered in a separate article.

Changes in the text: (LINES 249-251) “A recent advancement is the thulium fiber laser (TFL), a diode pumped laser that allows for operation in continuous or pulsed modes (43). TFL generates a 1940 nm wavelength.” (LINES 294-296) “Proietti et al. reported short term efficacy and safety of 28 patients treated with the TFL. The recurrence rates at 6 months was 21.7% and no intraoperative complications were observed (47).”

I would not consider this article for publication in the current form.

Reviewer E

Good detailed review in an important and contentious area of urology

Reply 1: We thank the Reviewer for their interest in our work.