

Re: Mahajan AD, Mahajan SA. Thulium fiber laser versus holmium:yttrium aluminum garnet laser for stone lithotripsy during mini-percutaneous nephrolithotomy: A prospective randomized trial. *Indian J Urol* 2022;38:42-7

We read the article by Mahajan *et al.*^[1] with utmost interest. We would like to congratulate the authors for the successful publication of their randomized trial on thulium fiber laser (TFL) versus holmium:yttrium aluminum garnet (Ho:YAG) laser for stone lithotripsy during mini-percutaneous nephrolithotomy (mini-pcni) surgery, which concluded that TFL required less stone disintegrating and operative time compared to Ho:YAG laser.

However, we believe certain aspects require explanation. Stone disintegration time and operative time depend on various stone-related factors such as the stone's size, number, location, and composition. To achieve complete stone clearance, more than one tract might be required to gain access to the renal pelvis, automatically increasing the operative time. In the methodology, it was mentioned that the individual stone volumes were added up in patients with multiple stones. How many patients in each group had multiple stones? Moreover, in how many patients were multiple tracts needed to achieve clearance? Operative time was calculated from initial puncture to exit. We would like to know if the time taken for gaining access (to pelvis) was included as it would affect the operative time?

TFL had proven advantages of lower retro-pulsion^[2] and was believed to be a potential breakthrough in managing ureteric calculi. However, higher heat generation was considered one of the major concerns.^[3] We believe that the present study showing higher rates of hematuria (possibly due to excessive heat generation) with TFL might significantly impact the concerns regarding its usage in other realms of stone surgery, especially in ureteric calculi.

The study categorized the type of stone based on the Guy's stone score. Guy's stone score consists of four groups.^[4] Authors had stated five groups throughout the manuscript, which will need correction. The

proportion of patients with larger stones was higher in the TFL group when compared to the Ho:YAG group (10.6% vs. 50.8%), and the patients in the Ho:YAG group had significantly smaller size calculi than the TFL group (56.1% vs. 25.4%). This difference was statistically significant, which points to the selection bias in the study despite randomization. No allocation concealment was mentioned in the study, which could have minimized the bias. Furthermore, no blinding was performed in the study. No details on sample size calculations were mentioned. Was the trial prospectively registered under the Clinical trials registry of India? If so, the registration can be disclosed in the manuscript. Furthermore, the period and duration of the study were not mentioned in the manuscript.

Overall, the present study, the first randomized trial on TFL versus Ho:YAG laser in mini-pcni surgery, did show the efficiency of the TFL in improving stone disintegration and operative times.

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