Author reply 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 thank the readers for their comments.

The study was conducted from May 2020 to May 2021. To our knowledge, there was no study published that compared thulium fiber laser (TFL) with holmium: yttrium aluminum garnet (Ho:YAG) laser lithotripsy in the Mini-Perc procedure for urolithiasis at the time of initiation of our study. The proposed sample size was estimated based on previously published paper by Enikeev *et al.*,[1] in which 120 patients were included in a proof-of-concept study with no comparison group. We could enroll 66 and 59 patients in Ho:YAG and TFL groups, respectively, due to COVID-19 situation, and based on recommendation from the statistician, we decided to discontinue the patient enrollment and presented the interim analysis.

The stone disintegration time is affected by various factors such as size, location, density, and number of stones. We agree that the proportion of stones was larger in the thulium fiber group as compared to the Ho:YAG laser group, but the average size of the stones was comparable in both, 15.6 mm in the Ho:YAG group and 17 mm in the TFL group. Similarly, the stone volume also was comparable in both the groups, 3410 cubic mm in the Ho:YAG group and 3710 cubic mm in the TFL group. The mean stone hardness (Ho:YAG – 1035 HU and TFL – 1160 HU) were comparable in both the groups. As the difference in the size of the stone, volume of the stone, and stone density/hardness was not statistically significant in both the groups, it is indicative that there was no bias in the randomization of the study. Randomization was done using online research randomizer tool (https://www.randomizer.org/). Randomized allotted numbers in both the sets were strictly followed.

Multiple stones were observed in 11/66 patients in the Ho:YAG group and in 16/59 patients in the TFL group. All the patients required single puncture for stone removal. Operative time was calculated from the successful puncture in the calyx till the exit policy.

We observed that the incidence of hematuria was higher in the TFL group as compared to the Ho:YAG group. We were not able to ascertain the exact cause for this but probably attributed to the heat generation in TFL. Although most of the *in vitro* studies[2] suggest that the heat generation is same as in Ho:YAG laser, further clinical studies will be required to know the exact effect of TFL on the mucosa of the pelvicalyceal system during percutaneous stone procedures.

CTRI registration was not obtained, but hospital ethics committee approval was taken prior to the initiation of the study (ECRHS/2020/04/01, dated April 15, 2020).

We apologize for the error in the Guy's stone score classification. It was a typographical error in Table 1, and hence subsequently appeared in the text.

Abhay Dinkar Mahajan,
Sumeeta Abhay Mahajan*

Department of Urology, Sai Urology Hospital, Aurangabad, Maharashtra, India.
*E-mail: drabhaymahajan@gmail.co

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