

Re: Vaddi CM, Ramakrishna P, Ganeshan S, Swamy S, Anandan H, Babu M, *et al.* The clinical efficiency and safety of 60W superpulse thulium fiber laser in retrograde intrarenal surgery. Indian J Urol 2022; 38:191-6

We would like to applaud Babu *et al.*^[1] on their successful publication of prospective research titled, “The clinical efficiency and safety of 60W superpulse thulium fiber laser in retrograde intrarenal surgery (RIRS), which found that superpulsed TFL (SP-TFL) is efficient and safe in RIRS.”

However, we feel that some points should be clarified. SP-TFL has demonstrated the benefits of decreased retropulsion^[2] and was seen as a possible revolution in the management of ureteric calculi. However, increased heat production was regarded as one of the key problems,^[3] which may result in higher rates of hematuria and postoperative

ureteric stricture, which may have a substantial influence on concerns about its use in other areas of stone surgery, particularly in ureteric calculi. It would be useful to know what was the stricture rate in this series and how many patients had an impacted stone. Furthermore, the authors do not discuss retropulsion rate, maneuverability, or visibility during surgery. While some studies have demonstrated a 4% retropulsion rate in URS,^[4] 2.5% of patients had substantial sight concerns, and 3.3% of cases had mild visibility issues in PCNL utilizing TFL.^[5] It would be useful to know the authors' experience on deterioration of vision, retropulsion, and maneuverability even subjectively.

The authors did not analyze the energy needed for various stone compositions. According to a previous study, calcium oxalate monohydrate stones needed an average of 24 J for ablation of 1 mm³, uric acid, and cystine stones required substantially <2.5 and 7.6 J, respectively.^[6] As a consequence, we feel that the stone composition should have been investigated further and that a direct head-to-head comparison in this study would have offered additional evidence on the influence of stone composition on TFL's efficiency. Only one surgeon conducted all surgeries in this research and the skill of the surgeons would be relevant and may impact the stone-free rates which might be related to technical expertise rather than the TFL. To reduce such prejudice, we believe that a group of surgeons, rather than a single surgeon, would be preferable. Additionally, a randomized control trial with a direct head-to-head comparison with the holmium laser would be useful.

The results of this research showed that SP-TFL is both effective and safe. Higher volumes of stones produce greater work efficiency, but stone densities have little effect on this. Future research may examine noise levels of SP TFL, surgeon fatigue, and the environmental and economic effects of these procedures.

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