

Re: Riveros CA, Chalfant V, Melchart T, et al. Does Moses technology improve the efficiency and outcomes of standard holmium laser lithotripsy? A systematic review and meta-analysis. *Cent European J Urol.* 2022; 75: 409-417.

Sabine Uguzova¹, Christian Beisland¹, Patrick Juliebø-Jones²

¹Department of Urology, Lancashire Teaching Hospitals NHS Foundation Trust, Preston, United Kingdom

²Department of Urology, Haukeland University Hospital, Bergen, Norway

Article history

Submitted: March 27, 2023

Accepted: March 28, 2023

Published online: April 21, 2023

Citation: Uguzova S, Beisland C, Juliebø-Jones P. Re: Riveros CA, Chalfant V, Melchart T, et al. Does Moses technology improve the efficiency and outcomes of standard holmium laser lithotripsy? A systematic review and meta-analysis. *Cent European J Urol.* 2023; 76: 167-168.

Key Words: urolithiasis <> laser <> ureteroscopy

We read with interest the systematic review published by Riveros et al., which has succinctly evaluated the available evidence on Holmium Moses mode. [1]. Their efforts are timely given the continued interest in Moses technology as a means to improve stone lithotripsy. As the authors rightly say, the initial findings from pre-clinical studies were extremely promising. Indeed, many will be familiar with the impressive video demonstrations of Moses technology from benchside models. Combined with the biblical nomenclature, which gives a suggestion of superhuman powers, impressive outcomes in the patient setting were eagerly anticipated. However, Riveros et al. have demonstrated that the reality has not lived up to those expectations. For while Moses mode does appear to hold technical advantages in terms of ablation speed and lasing time, these do not translate to benefits in terms of stone-free status or complication rate. The latter are

of course what are most important to the patient, namely, to be free of their stone and to get through their operation without problems. Even operation time was found to have no significant difference in this systematic review [1].

In contrast, other areas of laser technology, such as Thulium fiber laser (TFL) do seem to be able to deliver actual clinical benefit [2]. We would therefore argue that Moses technology has had sufficient time to prove its clinical worth and warrant further research attention. Instead, our focus should be aimed at investigating other areas including TFL, high versus lower power settings, temperature control and single-use ureteroscopes among other key topics where clinically meaningful results can be achieved [3, 4].

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

References

1. Riveros CA, Chalfant V, Melchart T, et al. Does Moses technology improve the efficiency and outcomes of standard holmium laser lithotripsy? A systematic review and meta-analysis. Cent European J Urol. 2022; 75: 409-417.
2. Ulvik O, MS AE, Juliebo-Jones P, Gjengsto P, Beisland C. Thulium fibre laser versus Holmium:YAG for ureteroscopic lithotripsy: outcomes from a prospective randomised clinical trial. Eur Urol. 2022; 82: 73-79.
3. Somani BK, Talso M, Bres-Niewada E. Current role of single-use flexible ureteroscopes in the management of upper tract stone disease. Cent European J Urol. 2019; 72: 183-184.
4. Tsaturyan A, Peteinaris A, Pantazis L, et al. The effect of prolonged laser activation on irrigation fluid temperature: an in vitro experimental study. World J Urol. 2022; 40: 1873-1878. ■

Correspondence

Patrick Juliebø-Jones
jonesurology@gmail.com