BIPOLAR VERSUS MONOPOLAR TRANSURETHRAL RESECTION OF PROSTATE

Dear Sir,

I read with interest the recent article by Poh et al,⁽¹⁾ in which the authors concluded that bipolar transurethral resection of the prostate (TURP) results in a lesser degree of cautery artefacts when compared to conventional monopolar TURP, albeit statistically insignificant. In their study, the authors also found that the resection time was significantly longer, the speed of resection significantly lower and the irrigation fluid volume significantly higher for the bipolar group. There was no statistically significant difference in terms of intraoperative drop in haemoglobin and serum sodium levels between the two groups.⁽¹⁾

However, a recent systemic review and meta-analysis has shown that the operation time did not differ significantly between monopolar and bipolar TURP⁽²⁾ Moreover, Ho et al, in a prospective randomised study, have found that the mean resection time and mean weight of resected prostate tissue were comparable for both groups.⁽³⁾ In another prospective randomised study, the decrease in haemoglobin and serum sodium levels was reported to be significantly lower in the bipolar group.⁽⁴⁾

These differences in Poh et al's findings could be explained by the underlying limitations of their study. First, the study did not mention the potential bias of the surgeons performing the surgeries, i.e. whether they were consultants or trainees (experience of the surgeons), the number of surgeons involved as well as whether both monopolar and bipolar TURPs were performed by the same surgeon. The other limitation of the study was that the monopolar arm of the study was a retrospective analysis. Therefore, this was not a head-to-head prospective comparison between monopolar and bipolar TURP.

Nonetheless, this study concurred with the findings of Akgül et al, who reported that bipolar TURP seemed to result in smaller degrees of cautery artefacts when compared to conventional monopolar TURP, although the difference was not statistically significant.⁽⁵⁾ A larger prospective randomised study comparing cautery artefacts of bipolar and monopolar TURP in a head-to-head comparison trial using fresh specimens should be carried out to confirm the findings of this study.

Yours sincerely,

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REFERENCES

- Poh BK, Mancer K, Goh D, et al. PlasmaKinetic[™] (bipolar) transurethral resection of prostate: a prospective trial to study pathological artefacts, surgical parameters and clinical outcomes. Singapore Med J 2011; 52:336-9.
- Mamoulakis C, Ubbink DT, de la Rosette JJ. Bipolar versus monopolar transurethral resection of the prostate: a systematic review and meta-analysis of randomized controlled trials. Eur Urol 2009; 56:798-809.
- Ho HS, Yip SK, Lim KB, et al. A prospective randomized study comparing monopolar and bipolar transurethral resection of prostate using transurethral resection in saline (TURIS) system. Eur Urol 2007; 52:517-22.
- Kong CH, Ibrahim MF, Zainuddin ZM. A prospective, randomized clinical trial comparing bipolar plasma kinetic resection of the prostate versus conventional monopolar transurethral resection of the prostate in the treatment of benign prostatic hyperplasia. Ann Saudi Med 2009; 29:429-32.
- Akgül KT, Ayyildiz A, Nuhoğlu B, et al. Comparison of transurethral prostate resection and plasmakinetic prostate resection according to cautery artefacts in tissue specimens. Int Urol Nephrol 2007; 39:1091-6.

Editor's note: The authors, Poh et al, have declined to comment on the above letter.