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European Association of Urology

## Letter to the Editor

**Re: Guido Giusti, Silvia Proietti, Moises E. Rodríguez-Socarrás, et al. Simultaneous Bilateral Endoscopic Surgery (SBES) for Patients with Bilateral Upper Tract Urolithiasis: Technique and Outcomes. Eur Urol 2018;74:810–5**

Giusti et al. [1] reported on a prospective analysis of 27 consecutive patients who underwent flexible ureteroscopy (fURS) on one side and percutaneous nephrolithotomy (PCNL) on the other side contemporaneously for bilateral renal stones. These results provide assertive evidence that simultaneous bilateral endoscopic surgery (SBES) is an effective treatment for bilateral urolithiasis. We read this report with great interest and would like to highlight some doubts that require clarification for a better understanding of the study.

The sample size was only 27 patients in the pilot study and the trial was not randomized. Therefore, we would like to know whether the sample size is based on statistical analysis or historical data or the actual number of cases that met the inclusion criteria. Although the data were collected prospectively, which strengthens the findings, we consider that this might be a limitation, as it affects the accuracy of conclusion to a certain extent. A larger study in the future may be necessary.

We consider SBES an innovative and complicated procedure that has the advantages of shorter operative time, reduced anesthesia, and patient benefits. Our institution is a high-volume center with experienced surgeons and we intend to carry out similar research. We would welcome advice on the safe and effective stone burden range for SBES on the basis of the authors' research experience, even for bilateral PCNL. Multiple and staghorn stones should be removed in patients who are able to tolerate the rigors of long and perhaps multiple modalities and procedures.

The stone attenuation (mean ± standard deviation) was 998.1 ± 342.7 Hounsfield units on the PCNL side and 1012.6 ± 338.7 Hounsfield units on the fURS side. These mean values are higher than in other reports [2] and we are curious about the reason why. Attenuation in Hounsfield units is a simple noninvasive method for assessing stone composition and can reveal an underlying metabolic abnormality and predict stone fragility, enabling physicians to select the most appropriate treatment option [3]. Similarly, we would like detailed information on the stone analysis, which was not mentioned in the study. Patients should undergo more specific analysis according to the European Association of Urology guidelines on urinary stones [4]. Stone analysis is fundamental for further metabolic evaluation.

The glomerular filtration rate (GFR) reflects renal function. The gold standard for clinical assessment of renal function is $^{99m}$Tc-DTPA renography. Determination of creatinine clearance is complicated and the level of serum creatinine does not truly reflect GFR. Therefore, formulas such as the Cockcroft-Gault formula and the Modification of Diet in Renal Disease equation are often used to calculate an estimated GFR [5]. We doubt the accuracy and validity of the Cockcroft-Gault formula for evaluating renal function in the study, as $^{99m}$Tc-DTPA renography would be more rigorous.

With the development of laser and endoscopy technology, SBES does indicate an advantage that may indeed have a patient benefit. We agree on the need for future prospective studies in this area and propose that any such trial would require an adequate sample size, stone analysis, and $^{99m}$Tc-DTPA renography to assess SBES efficacy and safety.

***Conflicts of interest:*** The authors have nothing to disclose.

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