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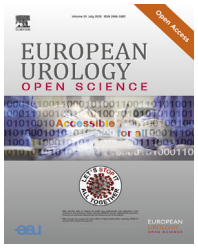

European Association of Urology

Letter to the Editor

Re: Andrea Bosio, Eugenio Alessandria, Simone Agosti, et al. Pigtail Suture Stents Significantly Reduce Stent-related Symptoms Compared to Conventional Double J Stents: A Prospective Randomized Trial. Eur Urol Open Sci 2021;29:1–9

The randomized trial by Bosio and colleagues [1] compared a pigtail suture stent (PSS; JFil, Rocamed, Monaco) with a conventional double-J (DJ) stent (Vortek, Coloplast, Humlebaek, Denmark) in terms of patient-reported symptoms. According to the authors, PSS reduced urinary symptom and general health index scores on the Ureteral Stent Symptoms Questionnaire (USSQ), as well as pain scores on the Visual Analog Scale. The final message is that the PSS reduces stent-related symptoms after ureteroscopy (URS) compared to conventional DJ stents. Although the authors should be congratulated for designing a rigorous trial that provides results for the PSS, we would like to address why this message is misleading.

First, not all conventional DJ stents are equal. Different materials and configurations are available to date, as well as level 1 evidence showing more or less favorable symptom profiles. What we know so far is that polyurethane and Vortek are not the best materials in terms of stent-related symptoms; a recent randomized trial showed that silicone stents (Imajin, Coloplast) are better tolerated than non-silicone polymer [2]. Silicone stents were associated with lower scores not only for USSQ urinary symptoms but also USSQ pain when compared to more rigid materials. Moreover, the magnitude of the reduction in USSQ urinary symptom score (6 points) appears to be similar for both silicone stents and PSS, suggesting that a trial is definitively needed to prove PSS superiority compared to the more tolerable conventional DJ stent.

The second issue is the study inclusion criteria. It is more than reasonable to test a newly available device in the safest possible clinical context. In this case, the authors chose to use the PSS in uncomplicated flexible URS for renal and proximal ureteral stones. However, the major drawback here is represented by the applicability of the study results to daily clinical practice. The current European Association of Urology guidelines [3] recommend no stenting following uncomplicated flexible URS on the basis of results from several randomized controlled trials. Moreover, more than 50% of ureteral stones are found in the distal ureter [4], seriously limiting the generalizability of the current study results.

Third, the kinetics of stent-related symptoms differ: tolerance to silicone stents appears to improve the longer the indwelling time [2], whereas such an improvement is not observed with PSS. This point underlines further differences in terms of tolerability, which extends beyond stent configuration itself and may be thus related to the stent material.

Fourth, the need to perform rigid cystoscopy in two (5%) patients for PSS removal because of poor grip on the sutures with flexible cystoscope forceps suggests that the PSS needs further technical refinement before becoming completely clinically friendly.

We embrace technological developments that will improve patient-reported quality of life. Therefore, the purpose of our letter is to highlight that if you want to use PSS on the basis of the results from this trial, it is important to ensure that it is for an uncomplicated case of a renal or upper ureteric stone, and that you are ready to manage possible inconveniences during stent removal. We would also highlight that conventional silicone stents are a valuable and clinically friendly option for reduction of patient discomfort [2].

Conflicts of interest: Olivier Traxer is a consultant for Coloplast, Rocamed, Olympus, EMS, Boston Scientific, and IPG. Oliver Wiseman is a consultant for Coloplast, Boston Scientific, and EMS. Eugenio Ventimiglia has nothing to disclose.

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