

## The initial treatment of urethral strictures: simple dilatation or urethrotomy?

### “Bougie urethral dilators: revival or survival?” – pros

Ewa Bres–Niewada

*Department of Urology, Medical University of Warsaw, Warsaw, Poland*

The study presented by A.A. Katib and A.Al-Adawi “Bougie urethral dilators; revival or survival?” in this issue of Central European Journal of Urology has a very interesting and promising title [1]. We know that there is still a place for less invasive interventions such as urethral dilatation and internal urethrotomy in the initial management of urethral strictures in selected patients [2,3]. Simple dilatation or urethrotomy are standard treatment options, but these procedures are associated with a high failure rate and very often require repeated treatment. The authors present the technique of bougie dilatation, reintroduced after years in their department. This old procedure is well-known by urologists, but the precise description of the technique and detailed protocol of urethral dilatation showed by the authors can be used successfully for teaching purposes (e.g. for students, young urologists).

The strength of the study is the high number of patients analysed, but the results should be interpreted with caution due to the retrospective design of the study. The high recurrence rate does not seem very surprising, as the poor effectiveness of simple dilatation in the treatment of urethral stricture disease is well-known. The main concern is the high complication rate (with 6.6% cases of perforation!).

Bougie dilatation is routinely used in the authors' department and has replaced internal urethrotomy. Should it really be the first-step procedure for the majority of cases?

This is difficult to answer because of a lack of evidence-based data on that topic.

According to the authors', bougie dilatation is above-all simple, low-cost and time-saving. Furthermore, it can also be performed as an office procedure with no need for operating room equipment and staff. The benefits of internal urethrotomy, which offers better visual assessment of all anatomic conditions

than urethrography alone, are not mentioned. Visual evaluation of the stricture can be helpful in decision making after the failure of initial treatment. Moreover, placement of the guide wire makes the procedure safer and helps to avoid false passage and perforation.

Attempts were made to establish which surgical method is the most effective and cost-effective in the treatment of male urethral strictures, but as the clinical data is very limited, a meta-analysis was not feasible [4]. There is only one randomised, prospective trial comparing the efficacy of dilatation versus internal urethrotomy as initial treatment for urethral strictures. The study revealed that both methods offer equivalent outcomes, but their effectiveness is reduced with increasing stricture length. Therefore, the authors recommend these methods only for strictures shorter than 2 cm and from 2 to 4 cm; strictures longer than 4 cm should be treated with primary urethroplasty [5]. There is no evidence that internal urethrotomy is better than dilatation, but many urologists intuitively believe so. Some experts recommend dilatation for meatal strictures, as it is a simple office procedure. They also advise dilatation for sphincter strictures after transurethral resection of the prostate (TURP) because dilatation, unlike internal urethrotomy, does not risk sphincter damage. On the other hand, urethrotomy is advised in any long or “difficult” stricture. Yet again, however, the authors emphasize that there is no evidence to support such intuitive recommendations [6].

The initial question remains unanswered. Well-designed and adequately powered clinical studies are needed to assess which method is most effective in the treatment of urethral strictures.

The next clinical problem that might be noteworthy is the failure after initial treatment. What should be the next step: redilatation, repeated urethrotomy or

urethroplasty? In this case, the answer seems to be very simple. We know from a few studies that repeated urethrotomy and dilatation for the treatment of urethral strictures are neither clinically effective nor cost-effective [6, 7]. Most urologists in Europe and the United States believe that urethroplasty is the best option after failed dilatation or urethrotomy [8, 9]. Yet everyday urological practice shows lack of understanding of such knowledge. Redilatations and

repeated endourological procedures are commonly performed despite very poor long-term outcomes. The first reason can be the patients' preferences or co-morbidities disqualifying them from operative treatment. The second, can be inexperience with urethroplasty surgery and that only a small group of urologists frequently perform such operations. That is why this issue should be addressed during fellowship training.

## References

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## Correspondence

Dr. Ewa Bres-Niewada. M.D., Ph.D.  
ewa.bres-niewada@wum.edu.pl