

**RECONSTRUCTIVE UROLOGY****Long-term results of permanent urethral stent Memotherm implantation in the management of recurrent bulbar urethral stenosis**

Sertcelik MN, Bozkurt IH, Yalcinkaya F, Zengin K

*Ankara Diskapi Yildirim Beyazit Training and Research Hospital 1. Urology Clinic, Ankara, and Department of Urology, Karaman State Hospital, Karaman, Turkey*

BJU Int. 2011 Jul; 14. doi: 10.1111/j.1464-410X.2011.10230.x. [Epub ahead of print]

Study Type - Therapy (case series) Level of Evidence 4 What's known on the subject? and What does the study add? Milroy reported 84% success at a mean of 4.5 years follow-up by usage of a permanently implantable "urolume" spent in 1993. Memotherm was developed later, especially for urologic use. Our study is one of the largest in this urea, with a high number of patients and a long follow-up period.

Objective: To evaluate the effectiveness and long-term results of permanent urethral stent (Memotherm) implantation in the treatment of recurrent bulbar urethral stricture.

Patients and Methods: In all, 47 patients with a history of previous unsuccessful treatment for bulbar urethral stricture were treated using Memotherm bulbar urethral stents between 1998 and 2002. Long-term follow-up data was analysed and discussed.

Results: At the end of the 7-year period 37 of 47 patients (78.7%) had been treated successfully. Post-micturition dribbling incontinence lasting up to 3 months after stent placement occurred in 32 (68.1%) patients, but this was reduced to only seven patients (14.9%) by the 7-year follow-up. There was stress incontinence of various severities in nine (19.2%) patients at the 1-year follow-up. These patients were those who had stenosed urethral segments adjacent to the external sphincter. At the long-term follow-up < 10% of the patients had stress incontinence complaints.

Conclusion: Memotherm is a good treatment option in patients with recurrent bulbar urethral stricture of any cause.

**Editorial Comment**

Currently, the management of bulbar urethral strictures is limited to dilation, urethrotomy and urethroplasty. An attractive compromise between the invasiveness of these options would be a permanently implanted urethral stent. Stents also promise the hope of drug-eluting versions which might help prevent stricture recurrence. Indeed, the Memotherm urethral stent is an attractive candidate for this role and has two distinct theoretical advantages over the older Urolume stent. First, the Memotherm expands at body temperature and contracts at colder temperatures, making it easier to remove. Second, it is a wall stent rather than a mesh stent like the Urolume which might limit the hyperplastic reaction. The current investigation is a retrospective study which reports outcomes at 7 years. However, nearly 50% needed a second procedure within that time frame and hyperplastic reaction was not uncommon. The authors posit that urethral stent placement should be the treatment of choice for urethrotomy failure as urethroplasty can always be performed later with good results. However, urethroplasty after Urolume stent removal frequently requires a 2-stage procedure (1). We look forward to prospective randomized trials of urethral stents.

## Reference

1. Eisenberg ML, Elliott SP, McAninch JW: Management of restenosis after urethral stent placement. *J Urol.* 2008; 179: 991-5.

**Dr. Sean P. Elliott**

*Department of Urology Surgery  
University of Minnesota  
Minneapolis, Minnesota, USA  
E-mail: selliot@umn.edu*

## Direct Vision Balloon Dilation for the Management of Urethral Strictures

Gelman J, Liss MA, Cinman NM

*Department of Urology, University of California , Irvine, Orange, California*

*J Endourol.* 2011; 11. [Epub ahead of print]

Abstract Urethral strictures are often initially managed with dilation using sequential metal sounds or filiform and follower dilators. While these techniques often successfully achieve at least a temporary increase to the caliber of the area of stricture, they are performed without visual guidance, and complications can include false passage and urethral perforation. We describe the first use of balloon dilator that allows the safe, controlled, and gentle and dilation of urethral strictures under direct vision.

## Editorial Comment

Balloon dilation of strictures may be preferable to dilation with sounds or filiforms and followers in those balloons allow radial dilation which avoids the shearing force of passing successively larger dilators. The authors describe the technique and equipment they have developed that allows for direct vision balloon dilation of urethral strictures. A 30F balloon dilator was developed that fits through a 21F rigid cystoscope. Other 30F balloons such as those used for renal tract dilation do not fit through a cystoscope; however, these older models can still be inflated under direct vision with the following technique. One first places the balloon catheter over a wire then passes a flexible cystoscope alongside the balloon catheter up to the balloon in order to directly observe the dilation.

**Dr. Sean P. Elliott**

*Department of Urology Surgery  
University of Minnesota  
Minneapolis, Minnesota, USA  
E-mail: selliot@umn.edu*