Case Report

Received: August 8, 1996

Accepted: January 16, 1997

Urol Int 1997;58:250-251

Temporary Spiral Stent after Endoscopic Repair of Posttraumatic Stricture of Prostatomembranous Urethra

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Key Words

Urethral stent

Injury

Urethra

Abstract

We placed a urethral spiral stent for 7 months after an endoscopic excision of scar tissue in a patient who had a posttraumatic stricture of the prostatomembranous urethra. This procedure immediately allowed the patient to void normally and avoided the need for an indwelling urethral catheter.

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Introduction

Endoscopic repair of an extensive stricture of the prostatomembranous urethra usually requires a postoperative long-term urethral catheter to prevent recurrence of strictures [1]. As an alternative, in a patient with posttraumatic stricture we temporarily placed a urethral stent after an endoscopic excision of scar tissue to avoid the need for an indwelling urethral catheter. This procedure yielded satisfactory results.

Case Report

A 60-year-old man was run over by a road roller and had a complete rupture of the prostatomembranous urethra (fig. 1) with pelvic bone fracture. The patient underwent a suprapubic cystostomy. Two months later, under the light guidance of a flexible cystoscope inserted into the prostatic urethra through the cystostomy channel, scar tissue at the prostatomembranous urethra was incised with a urethrotome and then excised with a pediatric resectoscope. The length of stricture was 2 cm. The external sphincter appeared intact. After removal of the urethral catheter which had been indwelling for 2 weeks, the patient was unable to void. Scar tissue of the stricture was further excised, and a prostatic spiral stent (Prostakath, 35 mm, Engineers & Doctors, Copenhagen, Denmark) was placed (fig. 2). From the next day the patient voided normally. The stent was left in place for 7 months without causing any adverse effects. The patient

Fig. 1. Retrograde urethrography 2 months after injury.

did not complain of any difficulty in voiding after removal of the stent (peak flow; 9.7 ml/s), although the urethra was dilated once a month for the next 6 months (fig. 3). Twelve months after stent removal, uroflowmetry showed an adequate urinary flow rate (peak flow; 13.1 ml/s). No urinary incontinence developed.

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Fig. 2. A plain X-ray film while Prostakath is left in.

Fig. 3. Retrograde urethrography 1 year after removal of Prostakath.

Discussion

Since long-term urethral catheters are annoying for patients, urethral stents have been used as a substitute for urethral catheters [2]. Recently, Yachia and Beyar [3] devised a metallic coil stent to treat strictures at the bulbo-membranous urethra. We used a similar stent in a patient to avoid placing a urethral catheter after endoscopic excision of scar tissue. Placement of the stent was beneficial to this patient because he was immediately able to void normally. Therefore, this procedure may be the method of choice for the endoscopic treatment of post-traumatic stricture of the prostatic-membranous urethra.

References I Gupta NP, Gill IS: Core-through optical internal urethrotomy in management of impassable traumatic posterior urethral strictures. *J Urol* 1986;136:1018–1021.

Nordling J, Holm HH, Klarsdov P, Nielsen KK, Anderson T: The intraprostatic spiral: A new device for insertion with the patient under local anesthesia and with ultrasonic guidance with 3-month follow-up. *J Urol* 1989;142:756–758.

Yachia D, Beyar M: Temporarily implanted urethral coil stent for the treatment of recurrent urethral strictures: A preliminary report. *J Urol* 1991;146:1001–1004.

T. Temporary Stent for Prostatic-membranous Urethral Stricture