Twelve O'clock Sphincterotomy: Technique, Indications, Results (Abbreviated Report)

H.	Helmut	Madersbacher
F.B.	Brantley	Scott

Roy and Lillie Cullen Department of Urologic Research, Division of Urology, Baylor College of Medicine, and Urology Service, St. Luke's Episcopal Hospital, Houston, Tex.

Key Words

Neurogenic bladder disease
Transurethral sphincterotomy
12 o'clock position

Abstract

In contrast to other investigators, the authors regard a transurethral sphincterotomy at the 12 o'clock position *alone* as sufficient and preferable. The anatomy of the external sphincter and the blood supply in this area may explain the good results.

Request reprints from: Dr. Helmut Madersbacher, Urolog. Universitätsklinik, Innsbruck and Rehab. Center AUVA, Häring (Austria)

In many patients with neurogenic bladder disease the point of greatest resistance during micturition is at the membranous urethra. Transurethral sphincterotomy is therefore the treatment of choice. Based on the anatomy of the external sphincter, a modified and rather simple but very effective method of sphincterotomy is described.

Technique

The resectoscope with an optical panendoscope is introduced and drawn back distally into the bulbous urethra. Three or four cuts are made 5–6 mm deep with the loop electrode in the 12 o'clock region alone. The sphincterotomy is sufficient once the bladder neck is visible from the bulbous urethra. A No. 26 Charr. Foley Silastic catheter is usually left in place for about 2 weeks.

Clinical Material and Indication

17 patients from 3 to 54 years underwent the procedure; 4 had already undergone unsuccessful surgery; 2 were admitted with a Foley catheter, 2 with suprapubic

76

Madersbacher/Scott

tubes, 2 with vesicostomies, and 1 catheterized himself intermittently. The indication was based on urodynamic studies with simultaneous pressure, flow, and electro-myographic recording of the pelvic floor combined with cinecystogram and ureth-roscopy.

Results

There were no peroperative complications; haemorrhage could be controlled properly by coagulation. The immediate postoperative course was uneventful. All patients became catheter-free. A comparison of the preoperative and postoperative urinary flow rates shows a striking improvement

and the values of residual urine a marked decrease. The follow-up confirmed the good results in 16 patients. However though the outflow obstruction is relieved increased incontinence is an expected undesirable side effect. Recently the senior author has also successfully cured incontinence in three patients of this series using a newly developed artificial sphincter made of Silastic.