



Initial Experience of Transurethral Resection with Pediatric Resectoscope for Incomplete Anterior Urethral Stricture

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ABSTRACT

Purpose: Endoscopic urethrotomy is an alternative method in treatment of urethral stricture. However, it have high recurrence rate because of the remained fibrotic tissue. Removal of the fibrotic tissue can maintain the patency of the urethral lumen after the procedure. We report the therapeutic efficacy of our initial experience using pediatric resectoscope for treating anterior urethral stricture in 16 cases.

Materials and Methods: From January 2009 to April 2011, transurethral resection with pediatric resectoscope was primarily performed on 16 patients with anterior urethral stricture. Retrograde urethrography, uroflowmetry, postvoid residual volume, IPSS score and QoL score were performed preoperatively. We used 11.5Fr pediatric resectoscope (Wolf) and monopolar electrosurgical generator. The stricture was incised under vision at the 12 o'clock location or the site of maximum scar tissue or narrowing in asymmetric strictures for working space. After incision, transurethral resection with pediatric resectoscope was performed to all scar tissues. Monopolar cutting current was set on 45 watt and coagulation current was set on 30 watt, fulgurate mode. Postoperatively, drainage of the bladder was performed for 7 days using an 18F latex catheter. Patients were followed up by IPSS score, QoL score, uroflowmetry and postvoid residual volume.

Results: Successful results without recurrence were achieved in 11 of 16 patients. Postoperative urethral dilation had been performed average 2.4 times (0~6 times). When we classified the results by etiology, the number of successful results in strictures with a trauma, iatrogenic, or unknown cause was 5 (7/11), 3 (3/4) and 1 (1/1), respectively. In 5 patients who failed treatment, we repeated transurethral resection with pediatric resectoscope in 1 patient, and periodic urethral dilation in 4 patients. No operative complications occurred in any patients.

Conclusions: Transurethral resection with pediatric resectoscope is an effective therapeutic method for anterior urethral stricture. More long-term follow-up and large scale studies are needed to confirm the efficacy of this procedure.

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EDITORIAL COMMENT

The video by Jang et al. nicely demonstrates the technique of transurethral resection of an anterior urethral stricture. The small caliber of modern day pediatric equipment is useful in certain cases when transurethral resection is performed. The patient population consisted of sixteen patients treated primarily for stricture disease. The average stricture length was short 0.6 cm.

For patients with short strictures, excision with primary anastomosis remains the gold standard against which other techniques should be

compared (1). It has proven to be a highly successful surgery and its results durable over time (2).

In this initial report, many patients required multiple dilations to maintain urethral patency. The main concern is that they will continue to require periodic dilations. The follow-up period is short (six months) and the failure rate at this short interval is 31% (5/16).

We look forward to longer term data as there may exist a subset of patients who can be treated effectively with durable results in this manner.

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