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# CLINICAL ANALYSIS OF THE FAILURE IN THE TREATMENT OF POSTERIOR URETHRAL STRICTURE WITH HOLMIUM LASER ENDOURETHROTOMY

# Hypothesis / aims of study

Posterior urethral stricture is a difficult problem to resolve in urology. Many surgical approaches, including Holmiun laser endourethrotomy, may fail due to many factors.

We aim to summarize the experience of failed Holmium laser endourethrotomy for posterior urethral stricture.

#### Study design, materials and methods

We retrospectively analyzed 17 cases with posterior urethral stricture treated with Holmium laser endourethrotomy but not cured.

## **Results**

All patients had the history of pelvic fracture and urethral injury and complained of dysuria. 8 cases have undergone the reconstruction of the ruptured urethra by Bank method. The length of the stenosis ranged from 0.5 to 2cm demonstrated by urethrography. The urethral stricture was incised radically in the position of 3, 9 and 12 o'clock. The catheter was indwelled for postoperative 4 weeks. Following up 6-12 months, 12 cases had dysuria after taking off the catheter and underwent excision of urethral stricture and end-to-end anastomosis. 3 cases underwent second Holmium laser endourethrotomy because of dysuria. 2 case with the weak urinary stream underwent dilation of the urethra.

## Interpretation of results

We analyzed failure causes as follows. Firstly, proper cases were not selected. Cases with length of urethral stricture >1cm were unsuitable for endourethrotomy, but end-to-end anastomosis of urethra was recommended. In addition, the incision depth was not enough. Furthermore, cicatrix of the stricture was not excised thoroughly because the surgeon was afraid of injury of urethral sphincter, rectal injury or urinary fistula.

## Concluding message

Although Holmium laser endourethrotomy is an effective mini-invasive treatment for posterior urethral stricture, mastering the indication of Holmium laser endourethrotomy and more surgical skills are very important. That will improve the disease prognosis.

# **Disclosures**

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