

Incisional Light-Guided Intervention (Ilgi) Technique for Urethral Stricture Treatment

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ABSTRACT

A male urethral stricture is common problems of the low urinary tract secondary to the transurethral procedure etc.. In this paper, we define a technique is the composition of the using flexible cystoscopy and internal urethrotomy simultaneously with two different surgeons. This method is an acceptable in patients who have multiple comorbidities, high risks and follow up with indwelling urethral catheterization.

Keywords: Urethral Stricture, Surgical Technique, Internal Urethrotomy, Flexible Cystoscopy

A Novel Surgical Technique Depiction

A urethral stricture is a scar of the subepithelial tissue of the corpus spongiosum that narrow the urethral tube. (1)Male urethral strictures are common and have a significant impact on a patient's quality of life and health-care costs[2]. A urethral stricture is a narrowing of the calibre of the urethra caused by the scar consequent on infection, injury and secondary to transurethral operation. Endoscopic laser therapy and the variety of urethral reconstruction treatment methods were started to use to overcome this important urologic entit[3].Despite this progress, urethrotomy still represents the preferred treatment concept for primary, short and bulbar urethral strictures[4].Sometimes, treatment of such this kind of problems can be a challenge.

Herein; we define the surgical technique was performed on the four different patients who admitted with urethral stricture. One of these cases that seventy-eight years old patient applied to our urology clinic in urinary retention. After failed urethral catheterization attempts; suprapubic cystostomy was performed. He has multiple comorbidities and previous Tur- p history.

Anaesthetists gave high risk for operation and then under sedo-analgesia urethral way was observed as totally obstructed. We entered through suprapubic catheter but first dilated with Amplatz sheath which used in percutaneous nephrolithotomy and then 16 fr flexible cystourethroscopy (Karl Storz, Tuttlingen, Germany) went through the inside of it. Then flexible cystoscopy rotates to the bladder neck towards to the bulbar urethra. (Fig. 1-2)When the device approached the narrowness, bedside operator noticed the light of flexible device and this stricture was cut with 21 Fr internal urethrotomy towards to the light of the flexible cystoscopy and then urethral catheterization has been done successfully.(Fig. 3-4)The traditional treatment for urethral stricture has been urethral dilatation for the first ages. The treatment of urethral strictures have highly developed after the first endoscopic urethrotomy was performed in 1893 by Felix Martin, Germany[5]. Direct vision internal urethrotomy can proceed directly for last 40 years. A primary and short stringency can be cured with this way. However, recurrent stricture and failed intervention make the case complicated. At that time; urethroplasty will be can important treatment option. [6]. In our cases; performed procedure was formally not defined with the flexible cystoscopy. However, if the patients have multiple comorbidities, can not mobilise in alone and if they are a candidate for follow-up with an indwelling urethral catheter could be a preferable. To conclude; dilatation and direct vision internal urethrotomy could be acceptable in the presence of comorbidities or patients who unwilling to

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urethroplasty. However; if the endoscopic treatment did not succeed, after putting the cystostomy catheter, Incisional Light-Guided Intervention (Ilgi) Technique could be an option. Different methods similar to ours have been used by the urologists. However; Ilgi Technique was described firstly in the literature by us.

Ethical approval

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research

committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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Fig 1. Dilatation of cystostomy tract



Fig 2. Flexible cystoscopy through Amplatz sheath

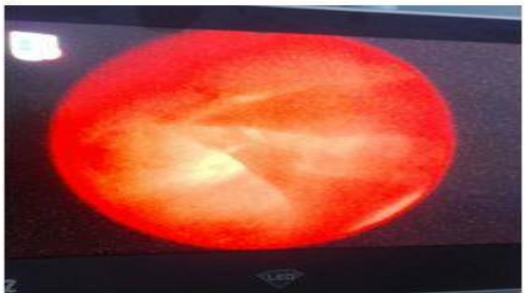


Fig 3. The light of flexible cystoscopy



Fig 4. Cold blade Cut with light-guided technique

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