Conservative Management of Lichen Sclerosus Male Urethral Strictures: Can Urethral Reconstruction be Safely Avoided?

Alexander T. Rozanski, Lawrence T. Zhang, Steven A. Copacino, Alex J. Vanni
Lahey Hospital and Medical Center, Burlington, MA

Introduction

- Lichen sclerosus urethral stricture disease (LSUSD) accounts for 13-14% of all male urethral strictures.1,2
- This can range from meatus/fossa navicularis strictures to panurethral disease.
- Classically, urethral reconstruction has been the mainstay of LSUSD management, however reported recurrence rates are as high as 71% following urethroplasty.3
- Compared to men with USD from other etiologies, men with LSUSD are more likely to be obese, use tobacco, have HTN, and have longer strictures.4

Aim

- There is a paucity of literature on the outcomes of conservative management strategies for LSUSD, such as endoscopic balloon dilation and CIC with intraurethral steroids.5
- We aimed to assess the outcomes of such patients at our center to determine the safety and efficacy of a conservative approach.

Methods

- Retrospective review of LSUSD patients placed on a conservative treatment regimen between 2005-2019
- Conservative management included: endoscopic balloon dilation or CIC with or without intraurethral steroids
- Exclusion criteria: obliterative stricture, prior urethral reconstruction, <3 months follow-up
- Primary outcomes: UTI, acute urinary retention (AUR), serum creatinine, uroflowmetry, need for subsequent urethroplasty
- Secondary outcomes: 3 patient reported questionnaires (USS PROM, SHIM, and MSHQ-EjD)

Results

- 125 men, median follow-up 28.5 months (IQR 9.4-52.0)
- Median age: 53.2 years (IQR 42.7-61.9)
- Median BMI: 35.5 kg/m² (IQR 30.3-40.7)
- Co-morbidities: HTN 58%, HLD 47%, tobacco 44%, DM 34%, CAD 11%
- Median stricture length: 12 cm (IQR 2.5-20)
- Stricture Location: meatus/fossa navicularis (30%), pendulous urethra (13%), and bulbopendulous urethra (57%)
- Common symptoms: slow flow (50%), sitting to void (26%), spraying (23%)
- 74% underwent balloon dilation, median of 2 (IQR 1-3) per patient
- CIC performed in 37%, with 35% of this subgroup using intraurethral steroids
- 12% had an AUR episode requiring urgent treatment, 28% had a UTI
- 13% started and failed conservative management and pursued urethroplasty

Conclusions

- Urethral reconstruction will always be an essential component of the treatment armamentarium for LSUSD.
- However, many patients, across a wide range of stricture lengths and locations, appear to be safely managed with conservative techniques.
- Close observation is warranted due to the risk of UTIs and AUR episodes.
- Ultimately, management decisions should focus on achieving patient-specific goals of care and maximizing quality of life.

LSUSD Manifestations

Uroflowmetry Data

<table>
<thead>
<tr>
<th>Urine Flow (mL/sec)</th>
<th>Median N</th>
<th>USS PROM</th>
<th>Median N</th>
</tr>
</thead>
<tbody>
<tr>
<td>First visit</td>
<td>11 80</td>
<td>SHIM</td>
<td>23 109</td>
</tr>
<tr>
<td>Last visit</td>
<td>11 43</td>
<td>MSHQ-EjD</td>
<td>21 80</td>
</tr>
</tbody>
</table>

References