INTRODUCTION

• Urethral stricture disease may occur at any point in a man's life.
• Recent studies suggest that urethral reconstruction in older men may be less successful.

OBJECTIVE

• We aimed to compare stricture characteristics, method of repair, and surgical outcome in patients undergoing bulbar urethroplasty in young, middle, and older aged patient groups.

METHODS

• We retrospectively reviewed our single—surgeon urethral stricture database between 2007 and 2019.
• Bulbar stricture patients were age-stratified by age at the time of surgery (≤30, 31-60, >60 years).
• Exclusion criteria: History of hypospadias, penile strictures, posterior urethral strictures, perineal urethrostomy and history of pelvic radiotherapy.
• Stricture method of repair, mean stricture length, and surgical outcome were collected.

SUCCESS OF URETHROPLASTY AMONG AGE COHORTS (%)

<table>
<thead>
<tr>
<th>Age</th>
<th>Success Rate (%)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤30 (n=128)</td>
<td>97.7</td>
<td>0.005</td>
</tr>
<tr>
<td>31-60 (n=332)</td>
<td>91.4</td>
<td>0.005</td>
</tr>
<tr>
<td>&gt;60 (n=180)</td>
<td>88.5</td>
<td></td>
</tr>
</tbody>
</table>

RESULTS

• We identified 654 patients with isolated bulbar strictures.
• 130 (19.8%) patients were ≤30 years old, 340 (51.9%) patients were 31-60 years old, 184 (28.1%) patients were >60 years old.
• Urethroplasty with buccal mucosal graft (BMG) had decreased success rates among men >60 (90.9% vs. 90.9% vs. 70%, p=0.01) while the success rate of excision and primary anastomosis (EPA) remained constant in all age cohorts (98.7% vs. 93.5% vs. 95%, p>0.05).
• Both older patient cohorts were less frequently managed with excision and primary anastomosis than younger men (71.2% and 60.8% vs. 82.3% respectively, p=0.0002).
• Over a median follow-up of 35.2 months, success rates decreased as patients advanced in age between cohorts (97.7% vs 91.4% vs 88.5%, p=0.01)

CONCLUSIONS

• Success of EPA urethroplasty remained similar throughout the age cohorts while success of substitution urethroplasty decreased with advancing age.
• Among patients who underwent bulbar urethroplasty, older men had the lowest success rate, despite slightly shorter strictures than the middle-age cohort.
• These findings are consistent with previously reported data and suggest a decline in urethral integrity with advancing age.
• Urethral reconstruction remains a safe and effective treatment for aging males with bulbar urethral strictures.