Simulation Training for Correction of Male Stress Urinary Incontinence: Assessment of Surgical Knowledge and Confidence with Cadaveric Laboratory Training

Chandrapal JC1, Davis L2, Perito P3, Henry G4, Jones L5, Carrion R6, Munarriz R7, Lentz AC1

1: Duke University School of Medicine, Division of Urology; 2: Duke Cancer Center, Center for Biostatistics; 3: Goral Gables Hospital; 4: ArkLaTex Urology; 5: Urology San Antonio; 6: University of South Florida, Department of Urology; 7: Boston Medical Center, Department of Urology.

Introduction

- As part of the 2018 Society of Urologic Prosthetic Surgeons and the Sexual Medicine Society of North America Annual Meeting, urology residents participated in a structured course which included didactic lectures and a hands-on cadaveric laboratory.

Aim

The aim of our study is to determine if a focused training course on prosthetic surgery for male incontinence can improve resident knowledge and confidence.

Methods

- Participants completed surveys before the lab as well as 2 weeks and 6 months after.
- Surveys consisted of 30 multiple-choice questions to assess procedural knowledge and self-confidence regarding prosthetic surgery for male stress urinary incontinence.
- Analysis assessing pre and post lab responses were performed using the Wilcoxon signed rank test for matched pairs. Secondly, resident training year and previous AUS and sling experience were assessed.
- Coloplast and AMS provided unrestricted educational grants to SUPS.

Demographics

<table>
<thead>
<tr>
<th>Participants</th>
<th>32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (median(range))</td>
<td>29 (27-34)</td>
</tr>
<tr>
<td>Level of Training</td>
<td>POY-3 5 (15.6%) POY-4 20 (63.5%) POY-5 6 (18.8%) POY-6 1 (3.1%)</td>
</tr>
<tr>
<td>AUS Experience</td>
<td>&lt;5 16 (50%) 5-10 11 (34%) &gt;10 5 (16%)</td>
</tr>
<tr>
<td>Sling Experience</td>
<td>&lt;5 30 (94%) 5-10 2 (6%) &gt;10 0</td>
</tr>
</tbody>
</table>

Results - Knowledge

- There were no differences in knowledge and confidence stratified by residency training level or AUS/sling experience.

Results - Confidence

- There were no differences in confidence at 6 months following course completion.
- Furthermore, the benefit is maintained at least 6 months following course completion.
- In the current climate of educational constraints and limited prosthetic educator availability, simulation courses play an important role in providing valuable hands on education.

Conclusion

- Participation can improve knowledge and confidence in surgical prostatectomy for male stress urinary incontinence.
- Simulation training of urologic residents improves both knowledge and confidence in prosthetic surgery for male stress urinary incontinence.
- Furthermore, the benefit is maintained at least 6 months following course completion.
- In the current climate of educational constraints and limited prosthetic educator availability, simulation courses play an important role in providing valuable hands on education.

References