Pessary in SUI

Soodabeh Darvish, ob&gyn, female pelvic medicine and reconstructive surgery, assistant professor of SMBU
Outline

• Mechanism of action in SUI
• Efficacy in SUI
• Clinical applications
• Contraindications
• Selection and types of vaginal pessaries
Mechanism of action

• For POP
• For SUI
• Decreased posterior urethrovvesical angle, elevation of the bladder neck, and increased urethral length

• Patient acceptance of pessaries varies from 42 to 100 percent
Efficacy

- The results of pessary treatment for SUI were inconclusive because of the small sample sizes.
- Treatment of SUI with a pessary appears to be less successful than PFMT during the first few months of therapy; however, long-term use of either strategy is associated with similar outcomes.
Clinical applications

• Patient preference for nonsurgical treatment
• Presence of severe medical comorbidities
• Need to delay surgery
• Recurrent POP or SUI and patient preference for avoidance of repeat surgery
Clinical applications

- Vaginal ulcerations caused by severe POP
- POP in a current pregnancy
- Desire for future childbearing
- Pessary use to treat cervical insufficiency in pregnant women is presented separately
Contraindications

- Local infection
- Exposed foreign body
- Latex sensitivity – The Inflatoball pessary
- Noncompliance – Noncompliance with follow-up
- Sexually active women who are unable to remove and reinsert the pessary
Selection and types of vaginal pessaries

• Most pessaries are made of silicone, nonallergenic, durable, autoclavable, and does not retain odors

• A few are made of other materials, such as latex or polycarbonate

• Patients should be asked about latex allergies prior to being fit with a latex pessary
Selection and types of vaginal pessaries

- Pessaries can be classified into essentially two categories: support and space-filling.
- The support pessary is used to treat all stages of POP and SUI whereas the space-filling pessary is mostly used for severe POP (stage III to IV).
Commonly used vaginal pessaries

(A) Smith; (B) Hodge; (C) Hodge with support; (D) Gehrung; (E) Risser; (F) Ring with diaphragm; (G) Ring; (H) Cube; (I) Shaatz; (J) Rigid Gellhorn; (K) Flexible Gellhorn; (L) Incontinence ring; (M) Inflatoball; (N) Donut.

Courtesy of Milex Products, Inc., Chicago, IL.
Ring vaginal pessary in situ
Gellhorn vaginal pessaries

The short-stem Gellhorn pessary can be useful for women with a short vagina.

*Courtesy of Leah Moynihan, RNC, MSN.*
Gellhorn vaginal pessary in situ
Cube vaginal pessary in position

Courtesy of Milex Products, Inc., Chicago, IL.
Selection and types of vaginal pessaries

• **Ring pessary** (support type pessary) was the most commonly used pessary

• **Ring and Gellhorn pessaries** are typically the first-line devices for patients who elect a pessary trial

• For patients with SUI but no POP, ring pessaries, with or without an incontinence knob, are typically tried first
Selection and types of vaginal pessaries

• If the vaginal introitus size is 1 to 2 fingerbreadths or the patient has stage II to III POP, a **Ring pessary** is likely to be successful.

• For women with small to moderate prolapse or SUI, routinely "ring with support“ use.

• Most women with prolapse can be treated with ring sizes 3, 4, or 5.
Selection and types of vaginal pessaries

• Advantages of the **Ring pessary:**
  ➢ Will fit approximately 70 percent of patients
  ➢ Easy to insert and remove
  ➢ More easily removed and inserted by the patient compared with space-filling pessaries
  ➢ May allow intercourse while in place
Selection and types of vaginal pessaries

• For patients with a 3 to 4 fingerbreadth introitus or advanced stage III to IV POP, a Gellhorn pessary is more likely to be successful

• Starts with Gellhorn pessary sizes 2.5, 2.75, and 3 inches. The smallest size the resolves the symptoms and remains in place is selected
Selection and types of vaginal pessaries

• Advantages of the Gellhorn pessary include the following:
  • Provides support for larger degrees of prolapse
  • Reduces rectocele and related symptoms
  • Retained by patients with a wide genital hiatus
Selection and types of vaginal pessaries

• Donut pessary

• Advanced prolapse and levator atrophy

• Most women can be treated with the 2.5, 2.75, and 3 inch sizes

• In whom Gellhorn pessaries have failed
Continence pessaries for SUI

• Continence pessaries are the most common, traditional form of support devices and may be used for women with stress incontinence either as an adjunct or substitute for pelvic muscle exercises.

• Overall patient satisfaction rates are approximately 50 percent at one year
Continence pessaries for SUI

- Devices can be useful for patients who have stress incontinence that occurs with specific activities or situations
## Comparison of pessary types for urinary incontinence and pelvic organ prolapse

<table>
<thead>
<tr>
<th>Pessary name</th>
<th>Sizes [1]</th>
<th>Mechanism</th>
<th>Advantages</th>
<th>Disadvantages*</th>
<th>Preferred patient</th>
<th>Ease of insertion and removal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prolapse pessaries: Support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonly used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ring</td>
<td>Diameter in inches (#3, 4, 5 most commonly used)</td>
<td>Support</td>
<td>Fits many women</td>
<td>May not work for patients with wide genital hiatus</td>
<td>SUI or POP</td>
<td>Easy</td>
</tr>
<tr>
<td>Less commonly used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shaatz</td>
<td>Diameter in inches</td>
<td>Support</td>
<td>Concave surface may reduce expulsion</td>
<td>Folds minimally</td>
<td>POP</td>
<td>Easy</td>
</tr>
<tr>
<td>Hodge</td>
<td>#2 to 4</td>
<td>Support</td>
<td>Can be used for prolapse and incontinence</td>
<td>Challenging for patient to insert</td>
<td>POP</td>
<td>Moderate</td>
</tr>
<tr>
<td>Gehrung</td>
<td>#3 to 5</td>
<td>Support</td>
<td>Can be used for prolapse and incontinence</td>
<td>Challenging for patient to insert</td>
<td>POP</td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Prolapse pessaries: Space-filling</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonly used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gillhorn</td>
<td>1.5 to 3.5 in diameter (2½, 2½, 2½ most commonly used)</td>
<td>Space-filling</td>
<td>Can support large prolapse</td>
<td>Must be removed for intercourse</td>
<td>POP</td>
<td>Difficult</td>
</tr>
<tr>
<td>Donut</td>
<td>1 to 3 inches in diameter</td>
<td>Space-filling</td>
<td>Helpful for advanced prolapse with levator atrophy</td>
<td>Must be removed for intercourse</td>
<td>POP</td>
<td>Moderate</td>
</tr>
<tr>
<td>Less commonly used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cube</td>
<td>Diagonal in inches</td>
<td>Space-filling</td>
<td>Highly effective</td>
<td>Risk of vaginal side wall erosion</td>
<td>POP</td>
<td>Difficult</td>
</tr>
<tr>
<td>Inflatable ball</td>
<td>2.00 to 2.75 inches in diameter</td>
<td>Space-filling</td>
<td>Easy removal and insertion by patient</td>
<td>Device stem protrudes from vagina</td>
<td>POP</td>
<td>Moderate</td>
</tr>
<tr>
<td>Spherical</td>
<td>6 sizes, 28 to 44 mm</td>
<td>Space-filling</td>
<td>Easy removal and insertion by patient</td>
<td>Must be removed for intercourse</td>
<td>POP</td>
<td>Moderate</td>
</tr>
<tr>
<td><strong>Incontinence pessaries</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commonly used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incontinence ring or dish</td>
<td>Sized by diameter</td>
<td>Urethral and vaginal support</td>
<td>Can be used for prolapse and incontinence</td>
<td>N/A</td>
<td>SUI with or without POP</td>
<td>Easy to moderate</td>
</tr>
<tr>
<td>Impressa</td>
<td>1, 2, 3 (small, medium, large)</td>
<td>Urethral support</td>
<td>Does not require clinician fitting</td>
<td>Need for new device with every use can be costly over the long term</td>
<td>SUI without POP</td>
<td>Easy</td>
</tr>
<tr>
<td>Less commonly used</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bull-shaped incontinence</td>
<td>3, 4, 5 (small, medium, large)</td>
<td>Urethral support</td>
<td>Does not require clinician fitting</td>
<td>Higher cost compared with other devices</td>
<td>SUI without POP</td>
<td>Moderate</td>
</tr>
<tr>
<td>Cylindrical intravaginal device</td>
<td>N/A</td>
<td>Urethral support</td>
<td>Does not require clinician fitting</td>
<td>Higher cost compared with other devices</td>
<td>SUI without POP</td>
<td>Moderate</td>
</tr>
</tbody>
</table>
Thanks For your Attention