Female Urinary Incontinence: A New Look at an Old Problem

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Vaginal Pessaries
DISCLOSURES

Dr. Lyons has not had in the past 3 years, a financial interest, arrangement or affiliation with one or more organizations that could be perceived as a direct or indirect conflict of interest in the content of this presentation.
Objectives

To review the indications and benefits of pessaries
To discuss the contraindications and barriers to using pessaries
To present the types and “how tos” of using a pessary
To understand the reason for discontinuation and complications of pessary use
WHY CONSIDER THE PESSARY?

- Demand for treatment of POP and/or UI is projected to grow by 45% in the next 30 years
- Viable alternative to surgery
  - Very effective, low-risk of complications
- Equally beneficial for both POP and/or UI
- Satisfaction rate is high – 72-92% report symptom relief
- Prevents problems that occur if left untreated
  - Loss of women from the work force
  - Increased use of incontinence products
  - Increased admission to assisted care facilities
  - Emotional stress
HISTORICAL PERSPECTIVES

• Appears in both Latin and Greek literature
• Many different types of materials and shapes
• Fell into disfavor 10-20 years ago
• Today offers a viable alternative to surgery
INDICATIONS

- Supports the vaginal musculature/bladder base in physiologic alignment
- Can provide a permanent solution to incontinence in women unable or unwilling to have surgical correction
- May improve a prolapse or prevent one from worsening
- Provides a diagnostic means of predicting which patients would be helped with surgical correction
BENEFITS

• Uro-gynecological
  – Reduces the symptoms of incontinence
  – Relieves the discomfort of a pelvic organ prolapse

• Pelvic Floor Rehabilitation
  – Repositions pelvic structures during pelvic floor rehabilitation
  – Promotes muscle re-education & strengthening
PELVIC ORGAN PROLAPSE

A. Cystocele  B. Rectocele  C. Enterocele
CAUSES OF PELVIC ORGAN PROLAPSE

• Constipation
• Exercise
• Pregnancy and Childbirth
• Abnormal collagen/connective tissue
• Hormonal factors
• Previous pelvic surgery

NOTE: The pessary works very well but some behavior modification to decrease causes is also essential.
Ahhhh, the dreaded passage from diapers to wings to designer depends....
BARRIERS TO DISCUSSING TREATMENT

- Consider incontinence or prolapse a normal part of aging
- Are able to rely on self-management regimes
- Feel associated shame and embarrassment
- Health care providers fail to inquire
- Are unaware of conservative treatments
- Fear of institutionalization
EMOTIONAL BARRIER

May initially view the pessary as a “foreign object”

• Need to understand the proper care

• Explain that the properly fitted pessary should not be felt
CONSIDERATIONS PRIOR

• Alternative treatment options

• Ability of the woman to manage the pessary

• Extent of sexual activity
SEXUAL ACTIVITY

- Intercourse is possible with pessaries that are not vaginally occlusive
- Must have the dexterity and know-how to insert and remove as necessary
- Note: Always ask about sexual activity – never assume
CONTRAINDICATIONS

Severe untreated vaginal atrophy

Vaginal bleeding of unknown origin

Pelvic inflammatory disease

Abnormal pap smear

Dementia without possibility of dependable follow-up care

Expected non-compliance with follow-up
THE EVALUATION

Pelvic Examination

- Determine the extent of the loss of pelvic support
- Assess degree of incontinence
- Rule out any pathology
- Assess estrogen status
MEASURES THE DESCENT OF THE ANTERIOR, APICAL AND/OR POSTERIOR PORTIONS OF THE VAGINA

RECORDS VAGINAL LENGTH AND WIDTH OF THE INTROITUS.

USES CENTIMETERS WITH REFERENCE TO THE HYMEN WHEN PERFORMING THE VALSALVA

NEGATIVE NUMBERS: DISTANCE ABOVE THE HYMEN

POSITIVE NUMBERS: DISTANCE OF PROLAPSE PROTRUDING BEYOND HYMEN

MAY GRADE THE PROLAPSE FROM 0 TO 3
Evaluation/Staging of Pelvic Organ Prolapse

BADEN-WALKER SYSTEM PELVIC ORGAN PROLAPSE–QUANTIFICATION SYSTEM

<table>
<thead>
<tr>
<th>GRADE</th>
<th>DESCRIPTION</th>
<th>STAGE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Normal position for each respective site, no prolapse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Descent halfway to the hymen, &gt; 1 cm above the hymen.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Descent to the hymen, ≤ 1 cm proximal or distal to the plane of the hymen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Descent halfway past the hymen, &gt; 1 cm below the plane of the hymen, but protrudes no farther than 2 cm less than the total vaginal length</td>
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</tbody>
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THE LEARNING CURVE

Insertion technique requires patience and practice

There are a variety of pessaries that could work for any given condition

There are a variety of conditions where a pessary will not fit correctly or correct the problem

Use should progress from the simple to the complex

The majority of practitioners use the ring with support and knob

Western Medicine & Dentistry
Schulich School of Medicine & Dentistry
Predictors of Pessary Failure

- Wide introitus
- Short vaginal length
- Posterior-wall defects
- Patients who desire surgery
PATIENT PREPARATION

Advise woman to arrive with her rectum as empty as possible

Have her void immediately prior to fitting

Reinforce the “trial & error” nature of pessary fitting

Allow woman to examine and hold pessary prior to insertion

The fitting process itself maybe a little uncomfortable
PESSARY FEATURES

• Silicone – FDA approved
  – Non-toxic, medical-grade silicone
  – Biologically inert - does not absorb vaginal odor
  – Pliable
  – Can be autoclaved or soaked
• Very few pessaries are made of latex rubber
• Available in a variety of sizes and shapes
  – The outside diameter is measured in inches with a range of one to four inches
SUPPORT PESSARIES

• Start with a trial of a support pessary
• Most women will do well with the ring with knob. Additionally, the membrane will support any prolapse
THE RING with KNOB

• Often referred to as the “incontinence ring” since it works so well for stress incontinence
• Available with membrane to support prolapse
• Has holes for drainage
• Knob applies pressure to the urethra against the pubic bone

• Very easy to insert and remove
SPACE FILLING PESSARIES

• If unsuccessful, progress to space-filling pessaries (donut, cube)
  – More difficult to insert and remove
  – Usually require provider assistance for cleaning
  – May have to be removed more often due to drainage issues
  – Work well in women who have both a cystocele and rectocele
# COMMON SIZES

<table>
<thead>
<tr>
<th>Type of Pessary</th>
<th>Size</th>
</tr>
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<tbody>
<tr>
<td>Ring with support</td>
<td>#1-4</td>
</tr>
<tr>
<td></td>
<td>(2.00-2.75 inches)</td>
</tr>
<tr>
<td>Ring w/ Knob, Gehrung, and Cube</td>
<td>#2-5</td>
</tr>
<tr>
<td></td>
<td>(2.25-3.00 inches)</td>
</tr>
<tr>
<td>Donut</td>
<td>#1-4</td>
</tr>
<tr>
<td></td>
<td>(2.25- 3.00 inches)</td>
</tr>
<tr>
<td>Gellhorn</td>
<td>#3-6</td>
</tr>
<tr>
<td></td>
<td>(2.25- 3.00 inches)</td>
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</tbody>
</table>
FITTING A PESSARY

– The pubic bone is an important landmark.
  • The pessary should fit snugly behind it.
  • There is less chance of expulsion if thus anchored
– Uterine Prolapse (if present)
  • Insert two fingers in the vagina to push any uterine prolapse back into place
  • Place opposite hand on abdomen and push on the fundus (if present) to hold in place
  • Reduce any cystocele or rectocele prior to fitting
– Put in largest size that will fit comfortably behind the pubic bone
TEST PRIOR TO FITTING

Insert two fingers into the vagina

Extend fingers to either side of the vaginal fornices

Keep fingers extended and pull through introitus

If you must close your fingers to get them out a pessary will probably be retained
MEASURING THE WIDTH

• Insert first two fingers of dominant hand deep to the posterior fornix
• Approximate size by using the fingers to determine the width
• Spread fingers wide to measure
• Remove fingers and compare to pessary sample or fitting kit
MEASURING THE LENGTH

– Reinsert fingers deep into the posterior fornix
– Make note of where the hand comes into contact with the pubic bone
– Compare to pessary.
INSERTION TECHNIQUE

• Slide it into the vagina, and curve posteriorly

• Release and allow to spring open to its normal shape
• Push deep into the vaginal vault
• Tuck securely behind pubic bone anteriorly and under the cervix (if present) posteriorly
INSERTION

Insert a finger tip into one of the larger holes and rotate the pessary until the knob is behind the pubic bone, at the level of the urethra.

Assess comfort

Should be able to sweep the tip of one finger around the pessary.

This helps to stabilize the urethrovesicular junction.
POST-FITTING

- Note any visible pessary or prolapse
- Ask the woman to bear down (Valsalva) while observing for any descent
- Inquire if woman feels pessary
- Ask to walk around room, sit up and down
- Assist to bathroom to assess ability to urinate
- Reassess upon return
- Inquire as to comfort
VAGINAL ESTROGEN

• The majority of older women with a pessary need vaginal estrogen
• The Estring works nicely since it also needs to be changed every 3 months
• Estrogen use keeps the vagina healthy and eliminates the need for regular douching
• Estrogen thickens the layer of the vaginal mucosa allowing for more support of the pelvic organs.
RETURN VISIT – one week after insertion

• Determine if there has been any improvement in symptoms
• Recheck the size – may go smaller or larger
• Ask about any change in elimination pattern
• Observe for a vaginal tissue reaction such as discharge, irritation, odor, or ulceration
SELF CARE VS. OFFICE VISIT

• Assess desire and ability of the woman to care for her own pessary

• The woman must feel comfortable touching own genitals

• Prior use of diaphragm increases the likelihood of a woman’s ability to care for her own pessary

• Observe dexterity

• Evaluate compliance issues and ability to perform self-care
SUBSEQUENT VISIT

Return in one month, and gradually lengthen to every 3 months for maintenance (cleaning)

Instruct the woman to return earlier if any odor, discomfort, or abnormal discharge

Reinforce that proper follow-up is important since most women have limited sensation in the vagina and may not be physically aware of any ulcerations

A list should be kept of pessary users and their expected date of return
REMOVAL: General Considerations

What goes in must come out!

• Removal is much more difficult than insertion since the pessary cannot be folded easily for withdrawal

• Upon removal, observe the pessary for any signs of discoloration, discharge, or odor. Some discoloration is normal

• Perform a speculum examination to determine the presence of any erosion
REASONS FOR DISCONTINUING

- Inconvenient to use
- Inadequate relief of symptoms *
- Uncomfortable *
- Elected for surgery
- Unable to remain in place *
- Difficulty urinating or having a bowel movement *
- Incontinence increased *

A DIFFERENT size or shape pessary should be offered
COMPLICATIONS

- Increase in vaginal discharge
- Odor
- Cytologic atypia
- Ulcerations
- Pelvic discomfort
- Incarceration
  - Scar/granulation tissue may form around pessary
- Complications are rare in the properly fitted and well maintained pessary
MULTIFACETED APPROACH

The pessary works very well to relieve symptoms related to incontinence and POP

Pelvic floor rehabilitation helps stabilize musculature around pessary – vaginal cones/tampons

Behavior modification helps reduce episodes of urgency, frequency, and incontinence

Medications help reduce bladder contractions and nourish the vaginal mucosa

Combination strategies result in a dramatic improvement in symptoms