UROGYNECOLOGY FOR THE FAMILY PRACTITIONER: UPDATES IN INCONTINENCE & PROLAPSE

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DISCLOSURES

- None
OBJECTIVES

- Be able to perform patient history, exam, and office evaluation of pelvic floor disorders
- Understand treatment options of pelvic floor disorders
- Describe strategies for prevention pelvic floor disorders
- Know when to refer to Urogynecologist
DOES SHE HAVE A PELVIC FLOOR DISORDER (PFD)?

- More than 50 percent of women $\geq 55$ yo suffer one or more of the problems caused by pelvic floor disorders
- One in three women (30%) with overactive bladder or urinary incontinence also suffer from bowel control issues
Voices for PFD

Join the Dialogue
Take the floor and connect with others experiencing PFD.
Start Now »

Find a Provider
Visit with a doctor to discuss your PFD symptoms.
Discover Now »

Tools for Patients
Resources to help prepare you for a visit with your doctor.
See Resources »

Upcoming Events
Keep up to date with the PFD Alliance and its activities.
Learn More »

Latest News
Patient Privacy Concerns

NEW! Voices for PFD YouTube Channel
Voices for PFD launched a YouTube channel with educational videos about pelvic floor disorders. Follow the link and subscribe today!

Voices for PFD is supported in part by:
DOES YOUR PATIENT HAVE A PELVIC FLOOR DISORDER?

3 types:

- **Bladder Control/Urinary Incontinence (UI)**
  - Overactive bladder
  - Urge urinary incontinence
  - Stress urinary incontinence
- **Pelvic Organ Prolapse (POP)**
- **Bowel Control**
  - Constipation
  - Accidental bowel leakage
    - Fecal Incontinence (FI)
    - Incontinence of Gas
OFFICE EVALUATION:  
HISTORY

**Bladder Control**
- Overactive Bladder
  - Urgency, Frequency of urination
  - Nocturia
  - ± Incontinence
- Urinary Incontinence
  - Urge, Stress, Mixed
- Voiding Dysfunction
- Urinary Retention
OFFICE EVALUATION: HISTORY

**Pelvic Organ Prolapse**

- Vaginal bulging
- Pelvic heaviness
- Incomplete emptying bladder/bowel
- Splinting
- Discomfort during sex
- Urinary frequency
- Urinary urgency
- Urinary incontinence
- Obstructive voiding/straining to void
- Urinary retention
- Recurrent UTI

*Most patients – no symptoms until prolapse beyond hymen*

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2. Barber MD. Clin Obstet Gynecol 2005
OFFICE EVALUATION: HISTORY

Pelvic Organ Prolapse

- Duration, frequency, provoking/relieving factors
- Impact on lifestyle & sexual function
- Severity of symptoms
- Previous treatments
- Degree of bother

1Brown J. Urology 2003
2Culligan PJ. Obstet Gynecol 2012
OFFICE EVALUATION: HISTORY

**Bowel Control**

- Anal Incontinence
  - Flatus, Liquid stool, Solid stool
- Rectal prolapse
OFFICE EVALUATION: HISTORY

Other Pelvic Floor Disorders
- Sexual Dysfunction
- Vulvar Pain
- Pelvic Pain
OFFICE EVALUATION: HISTORY

Other Urogynecologic Disorders

- Recurrent Urinary Tract Infections
- Hematuria
  - Gross
  - Microscopic (≥3 RBCs on formal UA)
- Urethral masses/Diverticulum
- Genitourinary Fistulas
OFFICE EVALUATION:
GENERAL EXAM

**General Health**
- Nutritional status
- Obesity

**Mental Status**
- Cognitive ability

**Functional Status**
- Mobility

**Neurological Exam**
- Physical dexterity

**Abdominal Exam**
- Masses
- Bladder distension
- Surgical scars

Wieslander CK. Obstet Gynecol Clin N Am 2009
OFFICE EVALUATION: PELVIC EXAM

**Inspection**
- Vulvovaginal Atrophy
- Suburethral mass

**Cough Stress Test**
- Standing, supine
- Prolapse reduction


**OFFICE EVALUATION: PELVIC EXAM**

*Pelvic Organ Prolapse Quantification (POP-Q)*

- Isolate and evaluate each compartment
  - Bivalve speculum for apical compartment
  - Half speculum for anterior and posterior compartments
- *Hymen* is an important landmark

OFFICE EVALUATION – PELVIC EXAM

*Pelvic Organ Prolapse Quantification (POP-Q)*
- Genital Hiatus
  - Rest/Straining
- Perineal Body
- Total Vaginal Length

Genital Hiatus (GH)  Perineal Body (PB)

Pessary Fitting
OFFICE EVALUATION: PELVIC EXAM

**POP-Q Staging**

<table>
<thead>
<tr>
<th>STAGE</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No prolapse</td>
</tr>
<tr>
<td>1</td>
<td>The most distal portion of the prolapse is &gt;1 cm above the level of the hymen</td>
</tr>
<tr>
<td>2</td>
<td>The most distal portion of the prolapse is ≤1 cm proximal or distal to the hymen</td>
</tr>
<tr>
<td>3</td>
<td>The most distal portion of the prolapse is &gt;1 cm below the hymen but protrudes no further than 2 cm less than the total vagina length</td>
</tr>
<tr>
<td>4</td>
<td>Complete eversion of the total length of the vagina. The distal portion protrudes at least the total vaginal length minus 2 cm beyond the hymen</td>
</tr>
</tbody>
</table>

Adapted & Modified from: Jelovsek SE. *Lancet* 2007

<sup>1</sup>Swift SE. *Am J Obstet Gynecol* 2003
OFFICE EVALUATION – PELVIC EXAM

**POP-Q Staging**

- *Hymen* is an important landmark\(^1\)

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\(^1\)Swift SE. Am J Obstet Gynecol 2003
Indications for *Urgent Treatment/Referral*¹

- Obstructed urination
  - Urethral or ureteral obstruction
  - Hydronephrosis, hydroureter
- Obstructed defecation
- Non-resolving vaginal erosions

¹Jelovsek SE. Lancet 2007
OFFICE EVALUATION: OTHER TESTS

- **Urinalysis**
  - Urine culture

- **Post-Void Residual (PVR)**
  - \(\leq 100 – 200 \text{ mL}\)

- **Cystometrics/Urodynamics**
  - Simple/Multichannel

- **Imaging Upper Urinary Tract**
  - *Indicated when treatment of prolapse beyond the hymen is observation only*
  - Renal Sonogram/CT Urogram

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1Abrams P. Neurourol Urod 2010
TREATMENT: UI & POP

No treatment needed if patient not bothered and can empty bladder and bowels

Expectant Management / Reassurance

- Rate of Prolapse Progression (> 2cm)
  - Range $11.0 - 19.0\%^{1-3}$

- Rate of Prolapse Regression (> 2 cm)
  - Range $2.7 - 3.0\%^{1-3}$
  - More common mild stages

Estrogen

- Increases urogenital health but not a treatment
- Prevent/treat pessary erosions (local$>$systemic) and enhances success of initial fitting$^4$

$^1$Gilchrist AS. Neuourol Urod 2013
$^2$Bradley CS. Obstet Gynecol 2007
$^3$Handa VL. Am J Obstet Gynecol 2004
$^4$Hanson LA. Int Urogynecol J 2011
**Pelvic Floor Muscle Therapy**

- At least 3 RCTs demonstrate anatomic and symptomatic improvement for mild to moderate prolapse (stages I-III)
  - Anatomic prolapse stage improvement
    - 19% treatment vs 8% no treatment (p = 0.035)

- ? Long term benefits
  - Poor compliance over time

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1 Hagen S. Int Urogynecol J 2009
2 Stupp L. Int J Urogynecol 2011
3 Braekken IH. Am J Obstet Gynecol 2010
4 Bo K. Obstet Gynecol 2005
PELVIC FLOOR EXERCISES: KEGELS & MORE
Pessary—*first line treatment*

**Support**
- Needs introital support
  - Ring
  - Incontinence dish

**Space-filling**
- Self-retaining
  - Gellhorn
  - Cube

- Improvement in SUI, OAB, and bulge symptoms
- Improved sexual satisfaction and body image\(^1\)
- Success rates 63\% - 86\%\(^2\)
- Ring/Gellhorn equally effective\(^3\)

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\(^1\) Lamers BHC. *Int Urogynecol J* 2011
\(^2\) Atnip SA. *Urol Nurs* 2012
\(^3\) Cundiff GW. *Am J Obstet Gynecol* 2007
TREATMENT: POP & SUI

Pessary or Surgery?

Pessary
- First-line treatment
- Older age
- Pregnant
- Planning pregnancy
- Inability to comply with post-operative restrictions
- Career/family priorities
- Medical comorbidities increase operative risks
- Do not desire surgery

Surgery
- Higher prolapse stage
- Prior prolapse or incontinence surgery
- More bothersome prolapse or SUI symptoms
- Sexually active

Culligan PJ. Obstet Gynecol 2012
Heit M. Obstet Gynecol 2003
Atnip SA. Urol Nurs 2012
Arias BE. Int Urogynecol J 2008
Kapoor DS. Int Urogynecol J 2009
TREATMENT: SUI

Surgery – SUI

- Midurethral Sling
  - TVT or TOT
  - >90% Effective at 10 years
- Urethral Bulking
  - >60% success
- Burch
  - 70% Success at 14 years
- Pubovaginal Sling
  - >60% success
TREATMENT: OAB OR UUI

- **Lifestyle & Behavior:**
  - Diet and Fitness
  - Pelvic Floor Muscle Exercises (Kegels)
  - Bladder Retraining
  - Pantiliners, Pads, Briefs, and Diapers
  - Pelvic floor Physical Therapy

- **Medicines**
  - Anticholinergics
  - Beta-3 agonist

- **Nerve stimulation**
  - Sacral nerve stimulation (Interstim)
  - Pretibial Nerve Stimulation (PTNS)

- **Botox bladder injection**

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1. Atnip SA. Urol Nurs 2012
2. Donnelly MJ. Int Urogynecol J 2004
TREATMENT: POP

- Surgery
  - Vaginal
    - Transvaginal hysterectomy with vaginal vault suspension, native tissue repair (anterior/posterior repair)
  - Abdominal (laparoscopic or robotic)
    - Sacrocolpopexy with mesh graft augmentation
PREVENTION: POP & SUI

Risk Factor Modification

- Limited Data
- Lifestyle Changes/Reduce Modifiable Risk Factors
  - Weight Loss
  - Avoid repetitive strain
    - Treat constipation
    - Optimize asthma/smoking cessation
    - Avoid heavy lifting occupations
  - Pelvic floor muscle exercises (Kegels)

1 Jelovsek SE. Lancet 2007
PREVENTION: POP

Risk Factor Modification

- Delivery Mode
  - Vaginal forceps enhances risk
  - Cesarean delivery somewhat protective

- Parity
  - Increased risk vs nulliparas
  - Risk appears to increase with each delivery

- Pregnancy
  - Controversial!

Mant J. BJOG 1997
Hendrix SL. Am J Obstet Gynecol 2002
Lukasz ES. Obstet Gynecol 2006
Moalli PA. Obstet Gynecol 2003
THANK YOU

#GOGATORS


REFERENCES

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