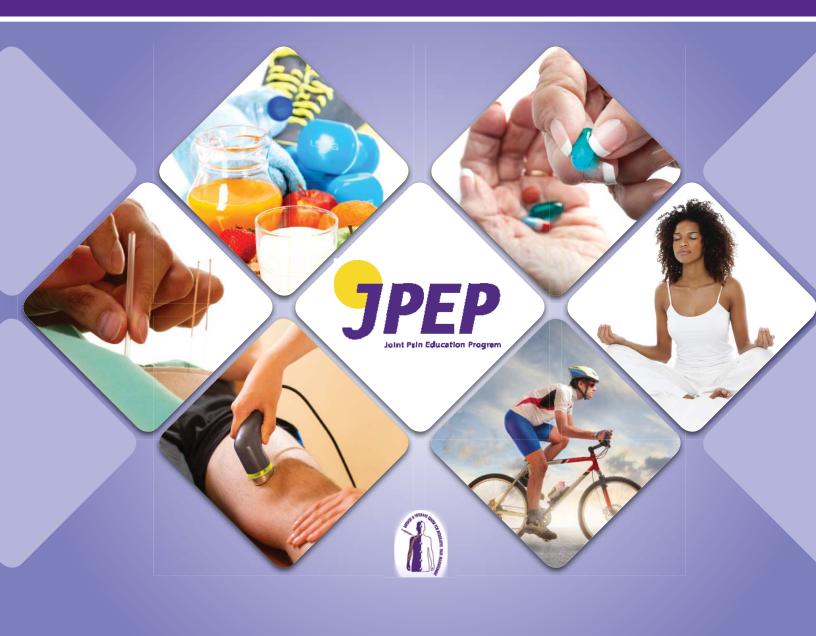
# Pain Management for Primary Care









Series: Eighteen Women and Pain

Module 18–3 Female Pelvic Pain



# Module 18–3

Female Pelvic Pain

#### By the end of the module, you will be able to:

- Approach pelvic pain patients with more confidence
- Understand that pelvic pain does not always imply gynecologic origin
- Demonstrate working knowledge of initial evaluation, management and treatment of common pain presentations
- · Recognize when it is time to refer

#### We will review:

Topic One: Pelvic Pain Overview

Topic Two: The Pelvic Exam

Topic Three: Common Pain Presentations

**Topic Four: Management Strategies** 

**Lead Authoring Subject Matter Experts** 

Department of Defense Jesse J. Rohloff, MD, FACOG

# Topic One Pelvic Pain Overview

#### What is chronic pelvic pain (CPP):

- Non-cyclic pain that persists for > 6 months,
- Localizes to the anatomic pelvis, to the anterior abdominal wall (at or below the umbilicus), or to the lumbosacral back or buttocks
- Is of sufficient severity to cause functional disability or lead to medical intervention

#### Notes

American College of Obstetricians & Gynecologists defines Chronic Pelvic Pain as: Notice this definition does not limit pain to pelvis, but involves abdomen and low back.

# Chronic pelvic pain is common.

- Chronic pelvic pain (CPP) is estimated to have prevalence of 3.8% in women aged 15-73
- In primary care practices, 39% of women complain of pelvic pain
- 10% of all referrals to gynecologists are due to CPP
- Indication for 12% of hysterectomies and over 40% of gynecological diagnostic laparoscopies are due to CPP

#### Notes

FOR COMPARISION (first bullet) prevalence migraine 2.1%, asthma 3.7%, back pain 4.1%. Chronic pain stats had changed little between the two CPP reviews of 2003 and 2014.

## Not all CPP is of gynecological origin: Remember the GRUMP mnemonic

- Gastrointestinal (irritable bowel syndrome)
- Reproductive (endometriosis, PID)
- Urologic (interstitial cystitis)
- Musculoskeletal (pelvic floor dysfunction)
- Psychoneurological (dyspareunia/vulvodynia)

#### Notes

Most common chronic pain presentations in young females include first 3 of pneumonic: irritable bowel syndrome, endometriosis and interstitial cystitis.

PID = pelvic inflammatory disease

# Topic Two The Pelvic Exam



The historic taboo associated with the examination of female genitalia has long inhibited this science of gynecology. This 1822 drawing by Jacques-Pierre Maygnier shows a "compromise procedure, in which the physician is kneeling before the woman but cannot see her genitalian Medicar generating the state of the process of the proces



#### The Pelvic Exam

The pelvic exam may or may not include assessment of the following:

- Vulva
- Cervix (speculum)
- Pelvic floor
- Bimanual

#### Notes

Speculum/bimanual should be performed at a minimum in pelvic pain assessment. This lecture has a gyn bias so discussion is focused on the pelvic exam, however abdominal and musculoskeletal exams of lowback/hips is also prudent depending on the presentation.

# The Vulvar Exam and Q-tip® Mapping (Complaint = Vaginal Entry Pain)

- · Assess for any skin lesions, ulceration or mass and document
- Use moistened q-tip to probe, typically U-shaped distribution between hymenal remnants and inside of labia minora (see diagram)
- · Very useful to perform exam while patient holds hand mirror

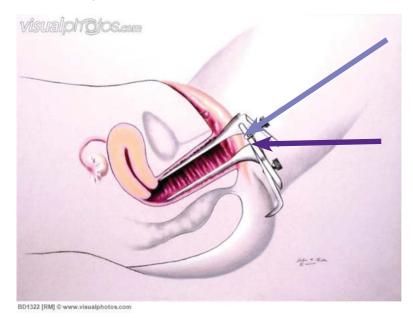


#### Notes

Hand mirror allows patient to direct clinician to perceived pain areas. It also allows provider to discuss anatomy and to help ensure pt understands sites for application of topical therapy if indicated.

# Opioids are associated with increased maternal risk

- Use appropriate size speculum
- If cervix cannot be found, perform bimanual exam to feel cervix with fingers then reintroduce speculum



Correct Angle

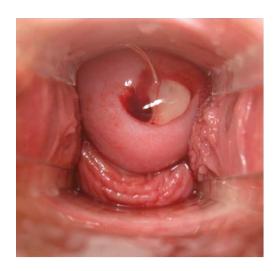
Incorrect Angle

#### Notes

As shown in diagram, always direct tip of speculum down toward pelvic floor, horizontal placement causes tip to run along urethra and into bladder causing unnecessary pain during exam.

# Cervical Exam (Complaint = Pain with Abnormal Vaginal Discharge)

- Visually assess cervix (and vaginal vault) for abnormal discharge or cervical lesions
- Low threshold for gonorrhea/chlamydia collection. Wet mounts for trichomonas/yeast as needed



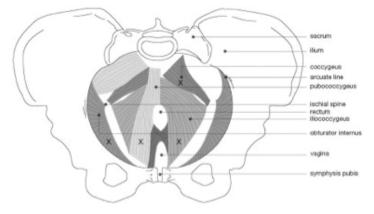
#### Notes

Notice IUD strings at 12 o' clock position. Normal cervical mucous 12-3. Normal vaginal mucosa at sidewalls and below cervix.

# Pelvic Floor Exam (Complaint = Positional Pelvic Pain)

- · Best performed with single index finger
- Attempting to assess pelvic floor tone and any trigger points
- Approach in a systematic fashion





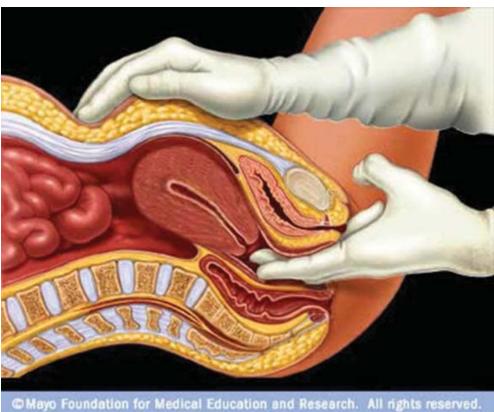
#### Notes

This is a more advanced pelvic exam skill, but useful for identifying patients who may benefit from pelvic floor PT. The healthy pelvic floor should not be painful to palpation. Pubococcygeus muscle from 7-11 on left and 1-5 on right with index finger inserted approximately 1" into vagina. Deeper insertion allows palpation of iliococcygeus, felt from 4-8. Obturator internus superior/lateral deeper vagina (approx 2nd/3rd knuckles) at 10 and 2 positions. Deep vaginal finger to 5 and 7 to evaluate coccygeus muscle. Lastly, one run finger along bladder/urethra when removing finger to determine any bladder component.

## Bimanual Exam (Complaint = Pelvic Pain)

#### **Key points**

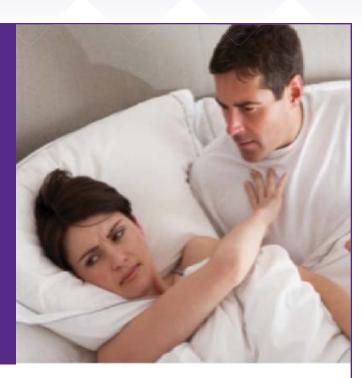
- Cervical motion tenderness?
- Uterine tenderness?
- Adnexal (ovary/tube) tenderness?



#### Notes

The Centers for Disease Control and Prevention recommends empiric treatment for PID in sexually active young women (<25) if they are experiencing pelvic or lower abdominal pain, if no cause for the illness other than PID can be identified, and if one or more of the following is appreciated on bimanual pelvic examination: cervical motion tenderness, uterine tenderness, or adnexal tenderness. Obviously tenderness can be a very subjective experience for the patient. Would she be tender just by the invasive nature of the exam regardless of infection? The bottom line is have a low threshold for therapy, as a missed Dx of PID carries far greater risks (infertility, chronic pain, sepsis) than overtreatment with a course of antibiotics. Don't worry if you can't feel the ovaries, they cannot normally be felt unless extremely enlarged (and will still typically be missed during exam).

# Topic Three Common Pain Conditions



#### Dysmenorrhea is a common complaint, but is cyclic unlike CPP

- Cyclic pain with menses is key
- May accompany other CPP conditions
- Prevalence highest age 20-24
- · Increased with smoking
- · History and physical exam:
  - Good menstrual history
  - · Location and radiation of symptoms
  - Associated symptoms
  - · Consider menstrual diary to help clarify menstrual association
  - Expect benign pelvic exam

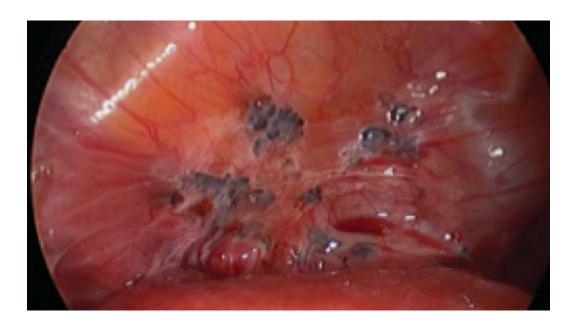
#### Notes

Good pick-up that CPP was defined as non-cyclic pain. Dysmenorrhea added due to it's common presentation and that secondary (uterine pain from another source) dysmenorrhea typically accompanies endometriosis and fibroids.

Pain typically most intense first 24-48 hrs of menses. Pain typically suprapubic with radiation to inner aspect of thighs or low back. Cramps frequently accompanied by backache, nausea, vomiting and diarrhea. Good menstrual history includes menarche age (first menses), regular/irregular cycles, #days bleeding, days when pain present, light/mod/heavy bleeding, prior therapy with nsaids or birth control.

# Endometriosis is the most common cause of CPP

- Deposits of uterine lining implant in pelvic cavity with retrograde menstruation
- Dysmenorrhea, dyspareunia, deep pelvic and lower abdominal pain common
- Can occur unpredictably and intermittently throughout menstrual cycle or can be continuous
- History and physical exam:
- Good menstrual history
- · Relationship of pain to menses
- Other organ systems affected during pain flares
- Pelvic exam can have cervical/uterine tenderness



#### Notes

Endometriosis is a gyn condition that occurs in 6-10% of women of reproductive age with a prevalence of 38% in infertile women and in 71-87% of women with chronic pelvic pain. Principal manifestations are chronic pain and infertility. lower image laparoscopic picture of endo localized to peritoneum, classically described as powder-burn lesions.

As shown on diagram, endo can implant in nearly any location of the body and pain sx can be cyclic or non-cyclic. Important to discuss any bladder or bowel associated sx. Deep dyspareunia (sexual pain) not uncommon with more advanced disease.

# Irritable Bowel Syndrome may cause pelvic pain

•	Most comm	on Gl diagn	osis in CP	P patients
	INIOSE COLLINI	ori Gradii		1 Datients

- Can present as lower abdominal or pelvic pain
- · Frequently associated with endometriosis and or Interstitial cystitis
- History and physical exam:

•	Over the past 3 months, have you had at least 3 days when you have had abdominal pain or discomfort that:		
		Was relieved with a bowel movement?	
		Began with a change in how often you were having a bowel movement	
		Began with a change in the form or appearance of the stool or bowel movement?	
		Has nonspecific abdominal exam findings?	

Questions based on Rome III criteria for IBS (pain symptoms at least 3 days/month in last 3 months associated with 2 or more of the above questions)

# Interstitial Cystitis may cause pelvic pain.

- An unpleasant sensation (pain, pressure, discomfort) perceived to be related to the urinary bladder,
- Associated with lower urinary tract symptoms of more than 6 weeks duration,
- Is in the absence of infection or other identifiable causes
- History and physical exam:
  - Focused urologic assessment
  - Ask about pain, urgency and frequency of urine
  - Suprapubic pain to palpation
  - Bladder base pain with vaginal exam

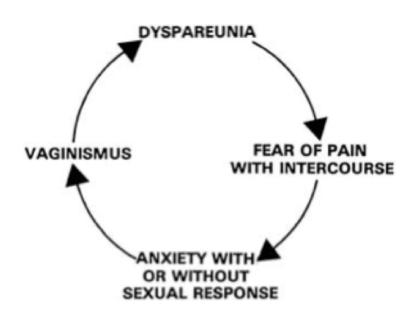
#### Notes

Questions based on Rome III criteria for IBS (pain symptoms at least 3 days/month in last 3 months associated with 2 or more of the above questions)

Pain-Urgency-Frequency questionnaire. Potassium instillation no longer recommended as diagnostic modality.

#### Dyspareunia may cause pelvic pain, especially in young women

- Pain with vaginal penetration (entry or deep) is reported in an incidence up to 22%
- Peak incidence of 4.3% in 20-29 year age group
- History and physical:
  - Detailed sexual history
  - Always consider current or past physical abuse
  - Determination of onset with first vaginal penetration vs delayed important in management strategy
  - Provoked vs non-provoked pain (Q-tip<sup>®</sup> test)



#### Notes

Dyspareunia is generalized entry or deep pelvic pain with vaginal penetration. Vaginismus is involuntary spasm/contraction of the pelvic floor muscles. Primary dyspareunia typically with pyschiatric component and benefit of referral for CBT (e.g., feelings of extreme guilt due to religious beliefs).

## **Knowledge Check**

HPI: 20 year old G0 recently married and is unable to consummate marriage due to severe pain with attempted vaginal penetration x 3 months. How should you proceed?

- a. Just like any other patient with history and physical
- b. Abbreviated history to allow more time for a challenging physical
- c. Reassure patient that today is just about getting to know her and that a pelvic exam can be performed later when she feels comfortable

# Knowledge Check - Answer

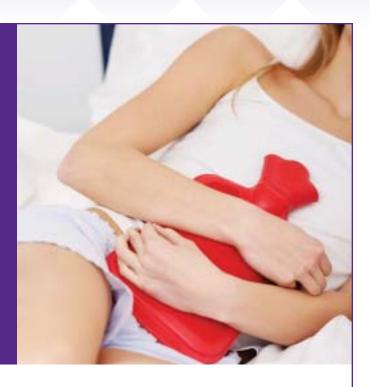
HPI: 20 year old G0 recently married and is unable to consummate marriage due to severe pain with attempted vaginal penetration x 3 months. How should you proceed?

- a. Just like any other patient with history and physica
- b. Abbreviated history to allow more time for a challenging physical
- c. Reassure patient that today is just about getting to know her and that a pelvic exam can be performed later when she feels comfortable

Primary dyspareunia frequently has a psychologic driving component. Reassuring the patient that one (or even two) appointments will be spent in discussion can go a long way in reducing anxiety and establishing trust. This will allow for an optimal pelvic exam at a later date.

g0 = no prior pregnancies

# Topic Four Management of Chronic Pelvic Pain



#### Dysmenorrhea is a common complaint, but is cyclic unlike CPP

Oral contraceptives (OCP):

- if patient also desires contraception
- 3 month trial reasonable
- Add NSAID if suboptimal response
- 80-90% relieved

NSAID: if OCP not desired (or tolerated)

- continuous dosing first 48-72 hours of menses, avoid PRN dosing
- 3 month trial reasonable

Consider nonpharmacologic options like heat pack, high frequency TENS, and acupuncture

Refer to ObGYN if no response with any modality in 3 months reasonable

#### Notes

Some VA and Military Providers have more experience caring for men Women and men have different communication styles Raises possibility for gender bias in pain treatment

Understand the different needs of women throughout the life cycle.
Understand that the psychosocial needs of women may be different than their male counterparts.
Communication needs of women are important to address at each visit.
Differences in mental health comorbidities may play an important role in pain care decisions.

# Endometriosis can be ruled out only by laparoscopy. Symptom management includes:

- NSAIDs typically used but usually do not help. There is no evidence of efficacy for endometriosis pain
- Hormonal therapy: OCPs, depo provera, intrauterine devices (IUD's) are effective
- Androgens like danazol is effective, however warn about side effects like acne, hirsutism and myalgias which, limit tolerance
- GNRH agonists (depo lupron) are effective but not superior to OCPs. Significant side effects include hot flashes, vaginal dryness, and osteopenia due to an induced medical menopause
- If no improvement after 3 months of respective therapy, recommend referral to ObGyn

# Irritable Bowel Syndrome treatment:

- If constipation is predominant, recommend bowel hygiene with hydration, diet, exercise, and consider the addition of fiber.
- If diarrhea predominant, use motility slowing agents like lomotil.
- If bowel spasm persists, antispasmodic agents can be helpful such as bentyl.
- Tricyclic antidepressants and SSRI's are effective and Neuromodulation should be discussed.
- GI referral if there is no improvement.

#### Dyspareunia (after ruling out other causes) treatment:

- Best to start with cognitive behavioral treatment and life style modifications
- Topical lidocaine or oils (olive, coconut) but avoid lubricants (KY, astroglide).
- Pelvic floor physical therapy and dilation treatment
- Couples Education and Behavioral Counseling
- · Education about pelvic anatomy can be useful in reducing anxiety
- Provide resources such as Vaginismus.com

#### Notes

Remember to defer exam if possible. Religious beliefs or prior sexual assault can be significant psychological barriers.

Vulvodynia committee opinion contains items to check for possible contact dermatitis. See vaginismus.com for vaginal dilator kits (we maintain a dozen of these in our clinic. Can be ordered by your supply dept.) viscous lidocaine can be applied 10-15 minutes prior to intercourse or as an overnight application for 4-6 weeks. Synthetic lubricants may contain alcohol base which can cause further irritation and pain.

# Interstitial Cystitis treatment:

Obtain urinalysis with culture. Consider culture even in patients with negative urinalysis to detect lower levels of bacteria that may be clinically significant

- First line: general relaxation/stress management, patient education, and mind-body therapies
- Second line: include amitriptyline, cimetidine, hydroxyzine, and pentosan polysulfate
- If no improvement after 3 months of respective therapy, recommend referral to ObGyn

# **Knowledge Check**

25 year old G0 with chronic pelvic pain desires IUD for possible treatment. Which, IUD should be used?

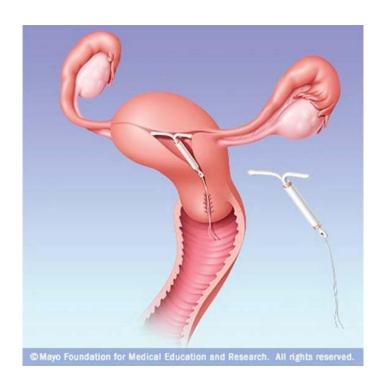
- a. Mirena IUD
- b. Paragard IUD
- c. Skyla IUD

# Knowledge Check - Answer

25 year old G0 with chronic pelvic pain desires IUD for possible treatment. Which, IUD should be used?

- a. Mirena IUD
- d. Paragard IUD
- a. Skyla IUD

Progesterone component of mirena reduces menstrual bleeding/cramping and pelvic pain associated with endometriosis. Paragard IUD increases bleeding/cramping. No studies currently for Skyla and pelvic pain so not recommended.





# Summary



Recall that not all pelvic pain is gynecological (think GRUMP). Be sensitive and always look for sexual trauma.

Be thoughtful and consider pelvic exam only if it will establish a diagnosis. Sometimes it is better to wait until trust has been established.

Feel confident to work in a team that uses behavioral, integrative and mind-body treatments. Involve the partner when appropriate.

# Resources

#### 1. Sexual pain

Vaginismus.com The Camera My Mother Gave Me, Susanna Kaysen When sex hurts, Andrew Goldstein National vulvodynia association (nva.org)

#### 2. General Pelvic Pain

International pelvic pain society (pelvicpain.org) A headache in the pelvis, David Wise Endometriosis.org

#### 3. Bladder Pain

Interstitial Cystitis (ichelp.org)
PUF questionnaire: http://www.ichelp.org/document.doc?id=1

4. International Pelvic Pain Society – Pelvic Pain Assessment form http://www.ucsfhealth.org/pdf/IPPS\_english.pdf

# References



American College of Obstetricians and Gynecologists. (2013). Chronic pelvic pain: ACOG practice bulletin no. 51 2004 (reaffirmed 2008). Last accessed March.

Dawood, M. Y. (2006). Primary dysmenorrhea: advances in pathogenesis and management. Obstetrics & Gynecology, 108(2), 428-441.

American College of Obstetricians and Gynecologists. (2011). Female sexual dysfunction. ACOG Practice Bulletin No. 119. Obstetrics and Gynecology, 117(4), 996-1007.

Gyang, A., Hartman, M., & Lamvu, G. (2013). Musculoskeletal causes of chronic pelvic pain: what a gynecologist should know. Obstetrics & Gynecology, 121(3), 645-650.

Howard, F. M. (2003). Chronic pelvic pain. Obstetrics & Gynecology, 101(3), 594-611.

Hanno, P. M., Burks, D. A., Clemens, J. Q., Dmochowski, R. R., Erickson, D., FitzGerald, M. P., ... & Faraday, M. M. (2011). AUA guideline for the diagnosis and treatment of interstitial cystitis/bladder pain syndrome. The Journal of urology, 185(6), 2162-2170.

Howard, F. M. (Ed.). (2000). Pelvic pain: diagnosis and management. Lippincott Williams & Wilkins.

American College of Obstetricians and Gynecologists. (2010). Management of endometriosis. ACOG Practice Bulletin No. 114. Obstetrics and Gynecology, 116(1), 225-236.

Marsicano, E., Vuong, G. M., & Prather, C. M. (2014). Gastrointestinal Causes of Abdominal Pain. Obstetrics and gynecology clinics of North America, 41(3), 465-489.

Steege, J. F., & Siedhoff, M. T. (2014). Chronic pelvic pain. Obstetrics & Gynecology, 124(3), 616-629.

Steege, J. F., & Zolnoun, D. A. (2009). Evaluation and treatment of dyspareunia. Obstetrics & Gynecology, 113(5), 1124-1136.

Soper, D. E. (2010). Pelvic inflammatory disease. Obstetrics & Gynecology, 116(2, Part 1), 419-428.

Practice Committee of the American Society for Reproductive Medicine. (2014). Treatment of pelvic pain associated with endometriosis: a committee opinion. Fertility and Sterility, 101(4), 927-935.

Haefner, H. K., & Spitzer, M. (2006). Consultants for: ACOG Committee Opinion Number 345. October 2006: Committee on Gynecologic Practice. Vulvodynia. Obstet Gynecolol, 108, 1049-52.

Zolnoun, D. A., Hartmann, K. E., & Steege, J. F. (2003). Overnight 5% lidocaine ointment for treatment of vulvar vestibulitis. Obstetrics & Gynecology, 102(1), 84-87.

# Notes





