Chronic Pelvic Pain

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VTC | Virginia Tech Carilion School of Medicine

Carilion Clinic

Learning Objectives

- To recognize the gynecologic and non-gynecologic causes of chronic pelvic pain
- To develop a clinical approach to assessing and evaluating a woman with chronic pelvic pain
- To list the surgical and non-surgical treatments of gynecologic causes of chronic pelvic pain

Disclosures

I have no financial disclosures

I hold leadership positions in the following organizations:

- Association of Professors of Gynecology and Obstetrics (APGO)
  - President
- Virginia Neonatal Perinatal Collaborative (VNPC)
  - OB Co-Chair

This talk is based on my research and biased by my experiences. It does not necessarily represent the views of these organizations.

Experiences That May Influence This Presentation Today

- My wife struggles with chronic pain from a genetic disorder and, even as a physician herself, feels unheard and judged
- I have spent my entire professional career caring for vulnerable populations who lacked access to care and, many times, lacked a voice
- My current ambulatory practice is working with women with substance use disorder

Defining Chronic Pelvic Pain

- “Pain symptoms perceived to originate from pelvic organs/structures typically lasting more than six months. It is often associated with negative cognitive, behavioral, sexual, and emotional consequences as well as with symptoms suggestive of lower urinary tract, sexual, bowel, pelvic floor, myofascial, or gynecologic dysfunction.”

ACOG Practice Bulletin 218. March 2020.

My Takeaways From The Definition

- "Pain symptoms perceived to originate from pelvic organs/structures *typically* lasting more than six months. It is often associated with negative cognitive, behavioral, sexual, and emotional consequences as well as with symptoms suggestive of lower urinary tract, sexual, bowel, pelvic floor, myofascial, or gynecologic dysfunction."

ACOG Practice Bulletin 218. March 2020.

Caveat

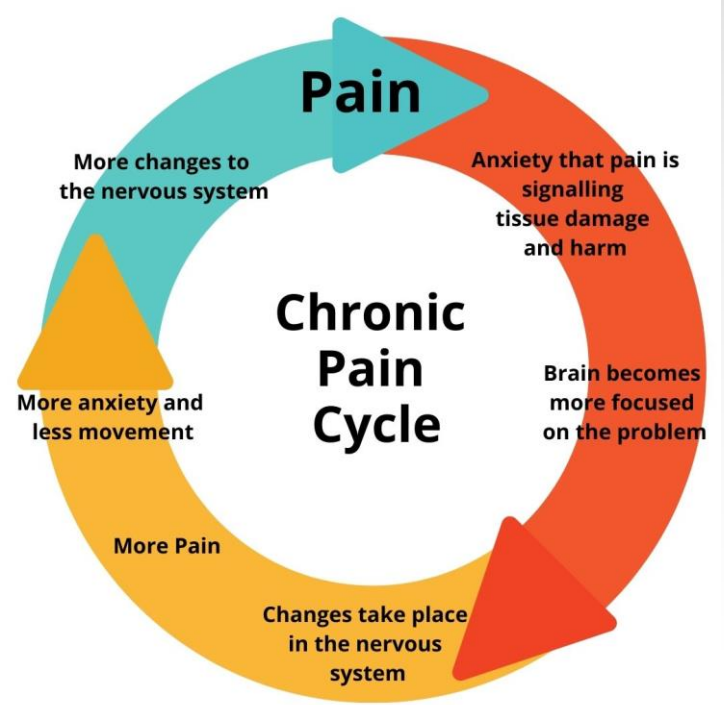
- Cyclic pelvic pain such as dysmenorrhea and Mittelschmerz comprise chronic pelvic pain
- Discussion of these will be limited due to time

Epidemiology

- Systematic review by Latthe (2006) stated prevalence
  - Non-cyclic pain - 2.1% to 24%
  - Dyspareunia – 8% to 21%
  - Dysmenorrhea - 16.8% to 81%
- Another review by Ahangri (2014) used a more stringent 6-month duration
  - Prevalence 5.6% to 27%

Effects of Chronic Pain

- Chronic pain, including pelvic pain, has far reaching effects
- A complex interaction of physical and psychological changes can ensue
  - Up to 1/3 of women with CPP meet diagnostic criteria for major depression



https://capitalareapt.com/chronic-pain-cycle-physical-therapy/

Seeing the Big Picture With Chronic Pain

- The patient's pain is real
- The clinician must face their own frustration
- Not every diagnosis has classic symptoms
- Eliminating diagnoses can help find the right diagnosis
- Treat the patient, not the diagnosis
- Multimodal approaches are effective

Differential Diagnosis and Associated Conditions

Box 1. Common Conditions Associated With Chronic Pelvic Pain

Visceral

- Gynecologic
  - Adenomyosis
  - Adnexal mass
  - Chronic pelvic inflammatory disease/chronic endometritis
  - Endometriosis
  - Leiomyoma
  - Ovarian remnant syndrome
  - Pelvic adhesions
  - Vestibulitis
  - Vulvodynia
- Gastrointestinal
  - Celiac disease
  - Colorectal cancer and cancer therapy
  - Diverticular colitis
  - Inflammatory bowel disease
  - Irritable bowel syndrome
- Urologic
  - Bladder cancer and cancer therapy
  - Chronic or complicated urinary tract infection
  - Interstitial cystitis
  - Painful bladder syndrome
  - Urethral diverticulum

Neuromusculoskeletal

- Fibromyalgia
- Myofascial syndromes
  - Coccydynia
  - Musculus levator ani syndrome
- Postural syndrome
- Abdominal wall syndromes
  - Muscular injury
  - Trigger point
- Neurologic
  - Abdominal epilepsy
  - Abdominal migraine
  - Neuralgia
  - Neuropathic pain

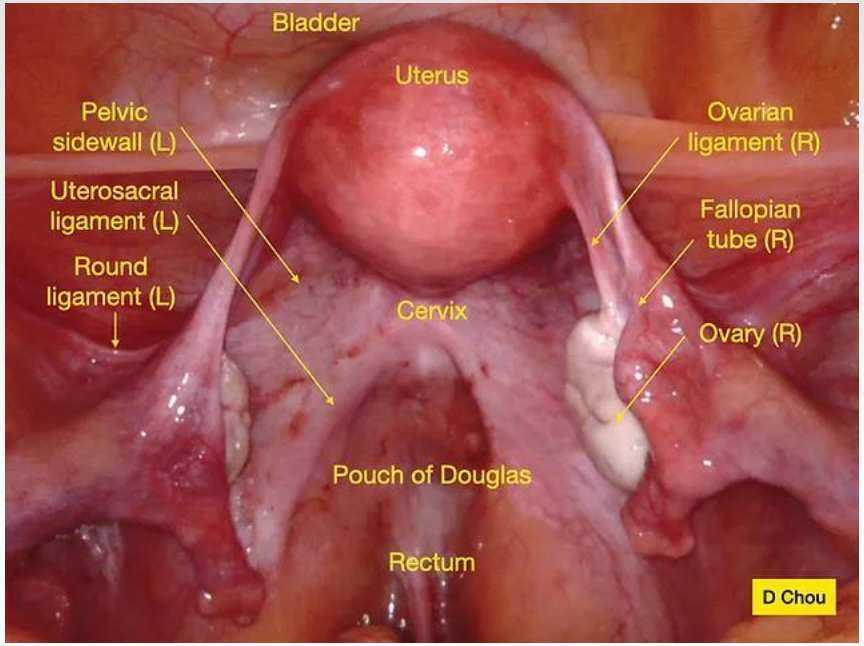
Psychosocial

- Abuse
  - Physical, emotional, sexual
- Depressive disorders
  - Major depressive disorder
  - Persistent depressive disorder (dysthymia)
  - Substance-induced or medication-induced depressive disorder
- Anxiety disorders
  - Generalized anxiety disorder
  - Panic disorder
  - Social anxiety disorder
  - Substance-induced or medication-induced anxiety disorder
- Somatic symptom disorders
  - Somatic symptom disorder with pain features
  - Somatic symptom disorder with somatic characteristics
- Substance use disorder
  - Substance abuse
  - Substance dependence

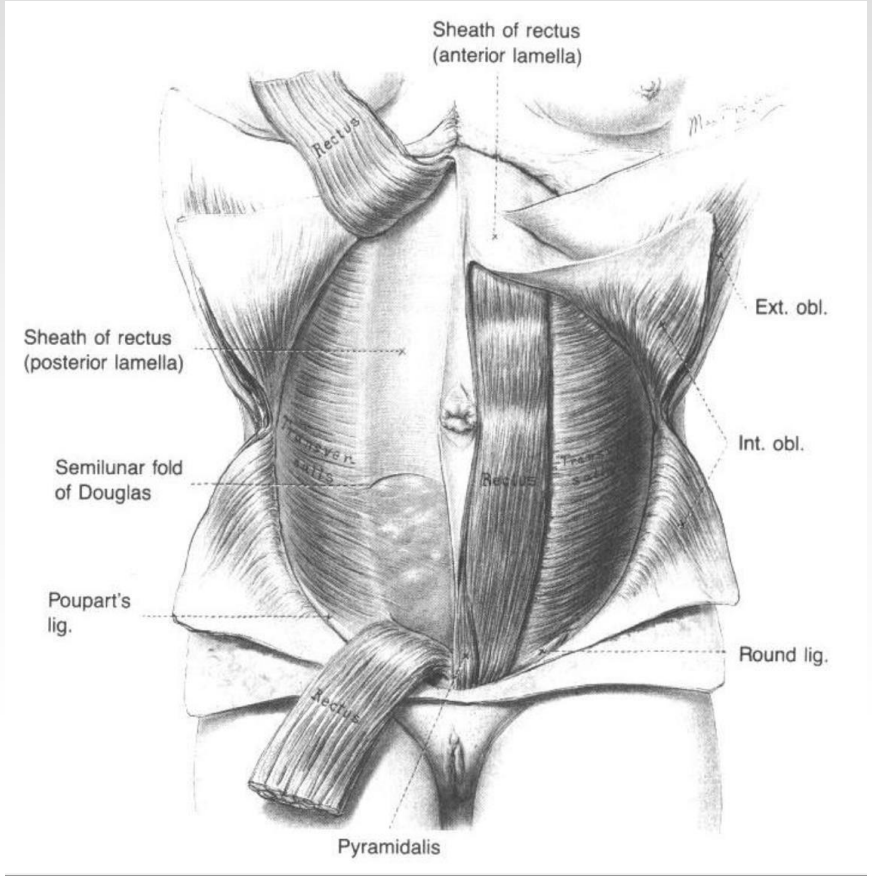
ACOG Practice Bulletin 218. March 2020.

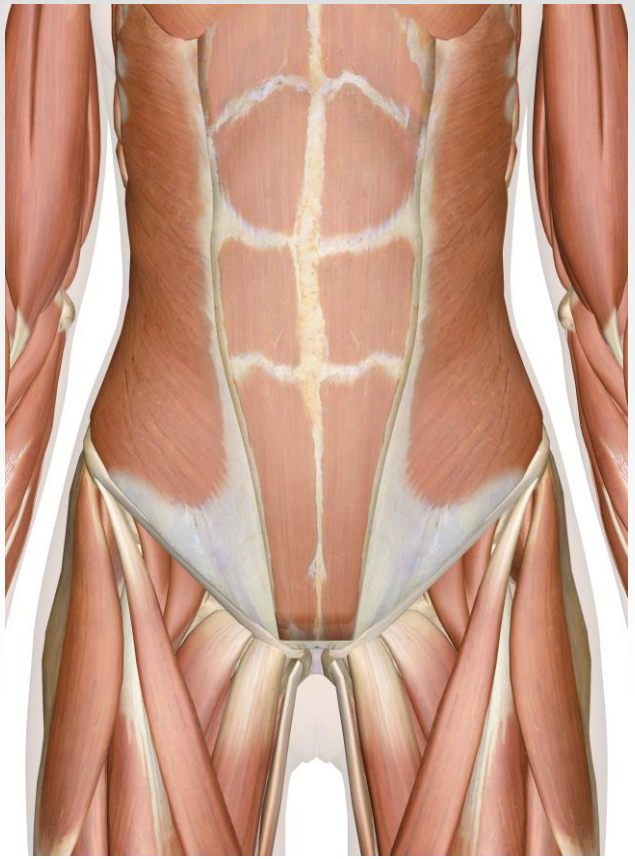
The Anatomy Is Complex

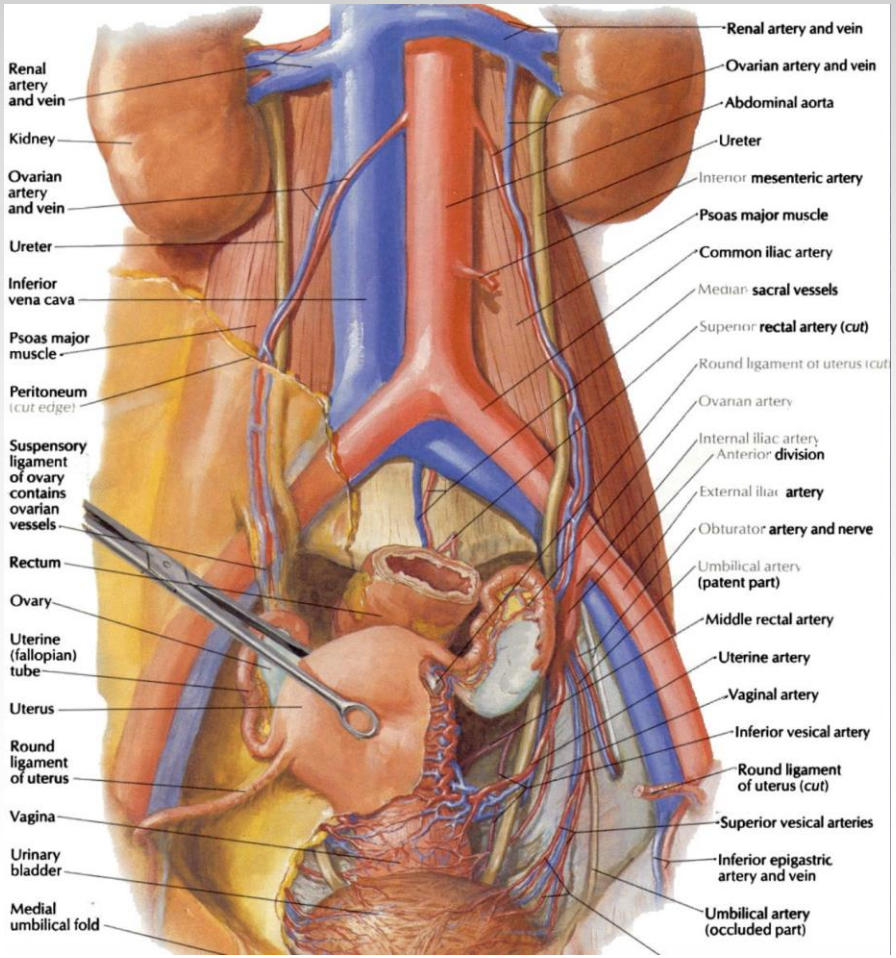
- The anatomy that gynecologic surgeons see does not necessarily tell the story

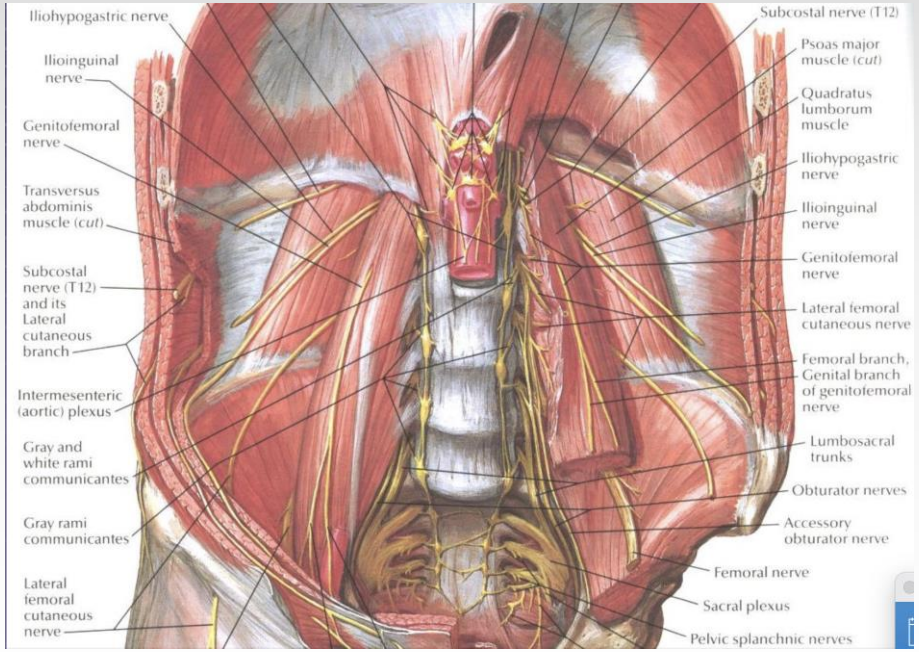


Anterior Abdominal Wall



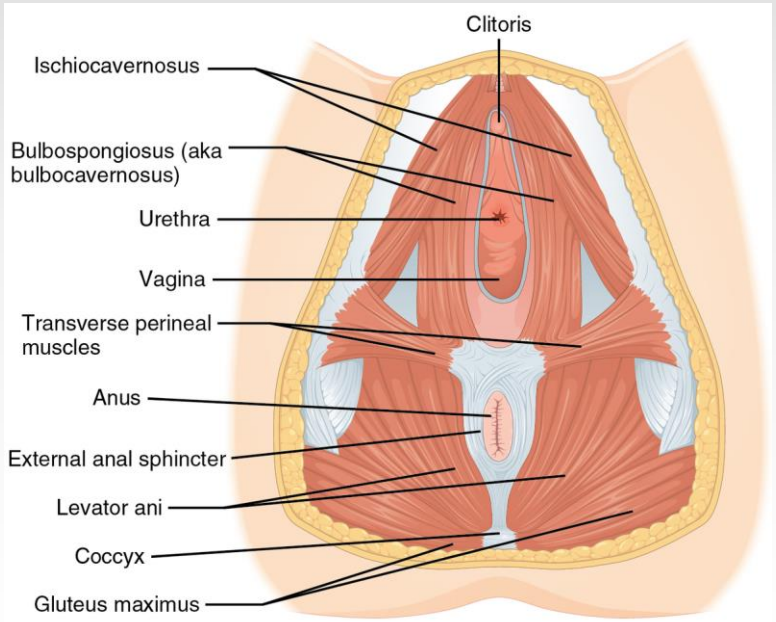



Renal artery and vein
Ovarian artery and vein
Abdominal aorta
Ureter
Inferior mesenteric artery
Psoas major muscle
Common iliac artery
Median sacral vessels
Superior rectal artery (cut)
Round ligament of uterus (cut)
Ovarian artery
Internal iliac artery
Anterior division
External iliac artery
Obturator artery and nerve
Umbilical artery (patent part)
Middle rectal artery
Uterine artery
Vaginal artery
Inferior vesical artery
Round ligament of uterus (cut)
Superior vesical arteries
Inferior epigastric artery and vein
Umbilical artery (occluded part)
Renal artery and vein
Kidney
Ovarian artery and vein
Ureter
Inferior vena cava
Psoas major muscle
Peritoneum (cut edge)
Suspensory ligament of ovary contains ovarian vessels
Rectum
Ovary
Uterine (fallopian) tube
Uterus
Round ligament of uterus
Vagina
Urinary bladder
Medial umbilical fold


Iliohypogastric nerve
Ilioinguinal nerve
Genitofemoral nerve
Transversus abdominis muscle (cut)
Subcostal nerve (T12) and its Lateral cutaneous branch
Intermesenteric (aortic) plexus
Gray and white rami communicantes
Gray rami communicantes
Lateral femoral cutaneous nerve
Subcostal nerve (T12)
Psoas major muscle (cut)
Quadratus lumborum muscle
Iliohypogastric nerve
Ilioinguinal nerve
Genitofemoral nerve
Lateral femoral cutaneous nerve
Femoral branch, Genital branch of genitofemoral nerve
Lumbosacral trunks
Obturator nerves
Accessory obturator nerve
Femoral nerve
Sacral plexus
Pelvic splanchnic nerves

The Pelvic Floor

- The part of the pelvis that is often overlooked as a cause of pain



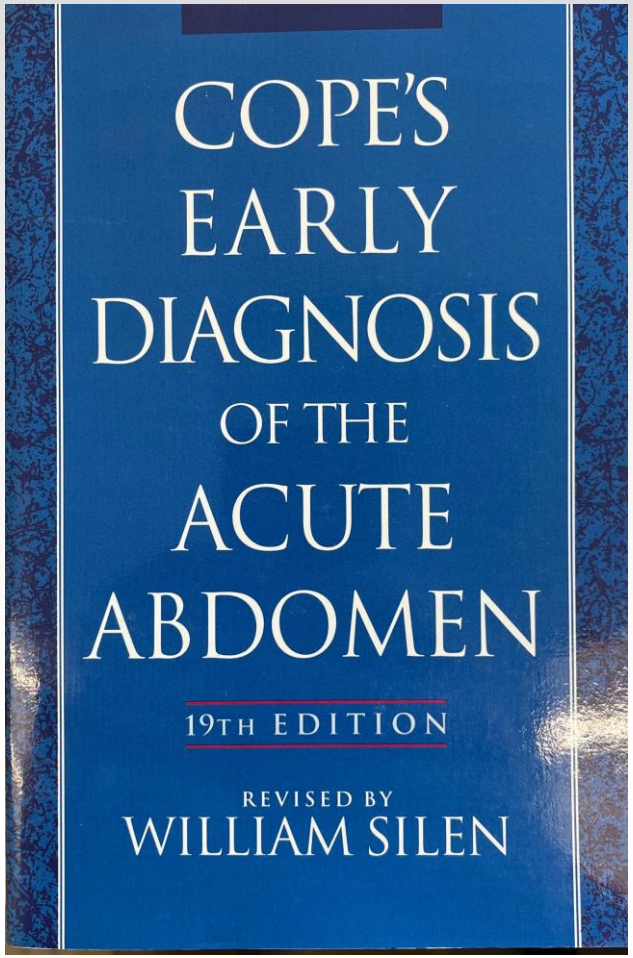
Evaluation of Pelvic Pain

Trauma Informed Care

- Describes an approach to healthcare aimed to enhance physical and emotional safety for patients and clinicians[1]
- Five principles
  - Safety
  - Choice
  - Collaboration
  - Trustworthiness
  - Empowerment
- Trauma or sexual abuse is present in up to 50% of women with chronic pelvic pain[2]

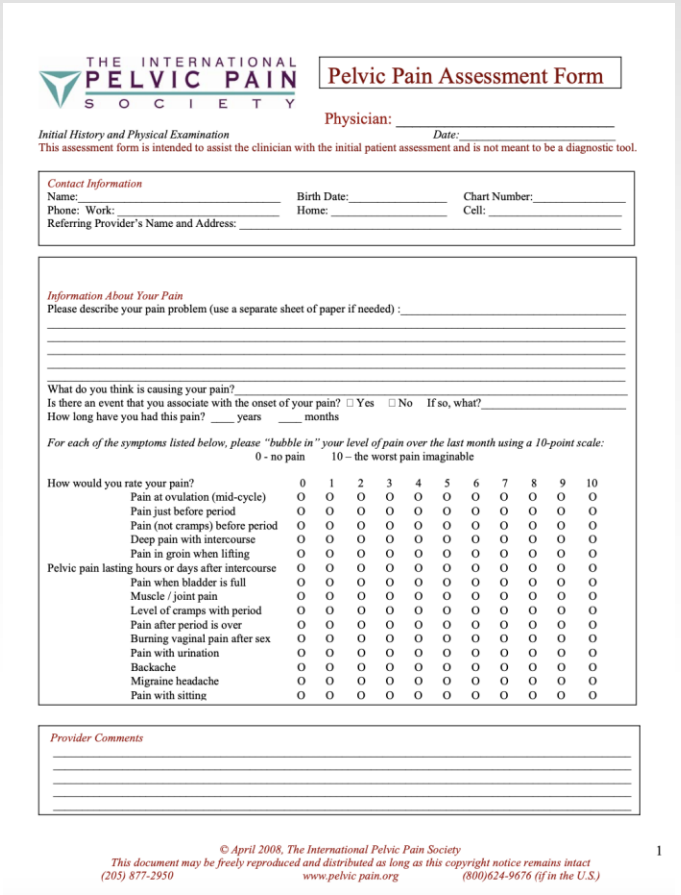
1Nagle-Yang S *et al.* Matern Child Health J. 2022 Dec;26(12)
2 Meltzer-Brody S *et al*. Obstet Gynecol 2007. 109(4)

The Patient's History Is Paramount



Patient Reported History

- Detailed chronology of symptoms
- Review of prior evaluations and treatments
- Alleviating and aggravating factors
  - Sexual activity
  - Menstrual changes
  - GI and urinary factors



THE INTERNATIONAL PELVIC PAIN SOCIETY

Pelvic Pain Assessment Form

Physician: _____

Initial History and Physical Examination *Date:* _____

This assessment form is intended to assist the clinician with the initial patient assessment and is not meant to be a diagnostic tool.

Contact Information

Name: _____ Birth Date: _____ Chart Number: _____

Phone: Work: _____ Home: _____ Cell: _____

Referring Provider's Name and Address: _____

Information About Your Pain

Please describe your pain problem (use a separate sheet of paper if needed) : _____

What do you think is causing your pain? _____

Is there an event that you associate with the onset of your pain? ☐ Yes ☐ No If so, what? _____

How long have you had this pain? ____ years ____ months

For each of the symptoms listed below, please "bubble in" your level of pain over the last month using a 10-point scale:

0 - no pain 10 – the worst pain imaginable

How would you rate your pain?	0	1	2	3	4	5	6	7	8	9	10
Pain at ovulation (mid-cycle)	O	O	O	O	O	O	O	O	O	O	O
Pain just before period	O	O	O	O	O	O	O	O	O	O	O
Pain (not cramps) before period	O	O	O	O	O	O	O	O	O	O	O
Deep pain with intercourse	O	O	O	O	O	O	O	O	O	O	O
Pain in groin when lifting	O	O	O	O	O	O	O	O	O	O	O
Pelvic pain lasting hours or days after intercourse	O	O	O	O	O	O	O	O	O	O	O
Pain when bladder is full	O	O	O	O	O	O	O	O	O	O	O
Muscle / joint pain	O	O	O	O	O	O	O	O	O	O	O
Level of cramps with period	O	O	O	O	O	O	O	O	O	O	O
Pain after period is over	O	O	O	O	O	O	O	O	O	O	O
Burning vaginal pain after sex	O	O	O	O	O	O	O	O	O	O	O
Pain with urination	O	O	O	O	O	O	O	O	O	O	O
Backache	O	O	O	O	O	O	O	O	O	O	O
Migraine headache	O	O	O	O	O	O	O	O	O	O	O
Pain with sitting	O	O	O	O	O	O	O	O	O	O	O

Provider Comments

_____

_____

_____

_____

_____

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(205) 877-2950 www.pelvic pain.org (800)624-9676 (if in the U.S.)

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Detailed Medical History

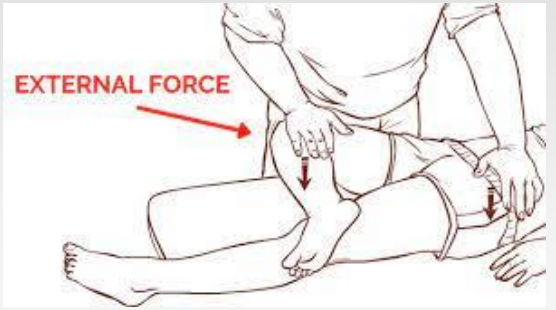
- Chronology, treatments, and triggers of pain
- Review of all medical diagnoses
- Review of all surgical procedures
  - Operative notes can be helpful
- Obstetric details
- Medications and allergies
- Psychosocial factors

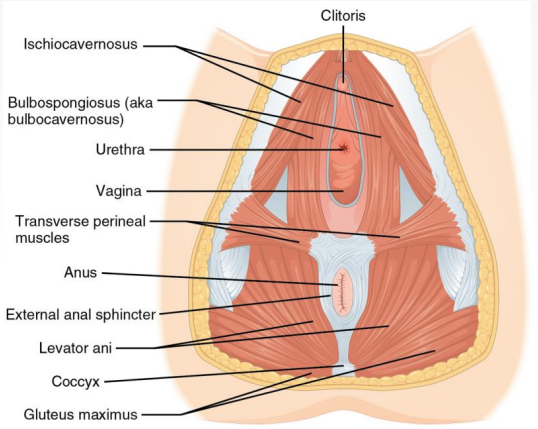
Physical Exam

- Palpation of
  - Lower back
  - Sacroiliac joint
  - Pubic symphysis
  - Abdomen
  - Genitalia
    - Including pelvic floor

Findings Suggestive of Neuromuscular Etiology

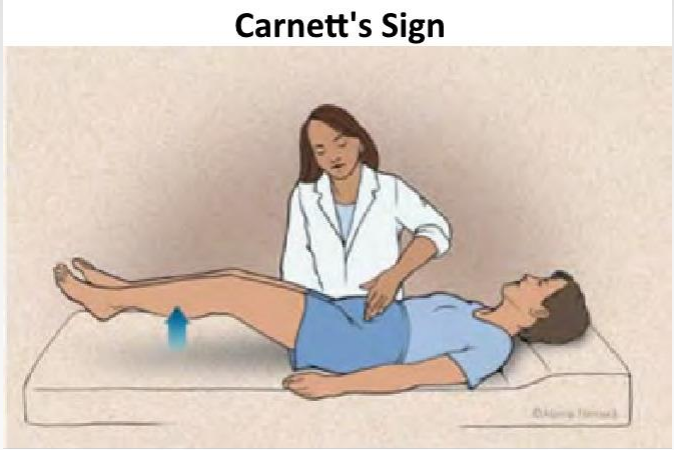
- FABER (forced flexion, abduction, external rotation)
- Pelvic floor muscle spasm and hypertonicity
  - Best assessed by trained pelvic floor PT





Carnett’s Sign

- Pain associated with abdominal wall contraction
  - Positive - tenderness worsens or does not improve
  - Negative - tenderness improves
- A positive Carnett’s Sign is associated with chronic pelvic pain



Step 1 : The clinician identifies and palpates the point of maximal abdominal tenderness (resting supine position).

Step 2: The patient raises both legs Off the examination table (tense position) while the clinician palpates the abdomen.

Alternatively, the patient can raise their head and shoulders off the bed, tensing the abdominal wall.

Positive Carnett's sign: Palpation of abdominal muscles in the tense position elicits the same or more tenderness as the rest position → musculoskeletal source (abdominal wall pain).

Initial Testing

- “I do not do anything routinely as that would be evidence of an ossified cerebrum.”
- Testing should be based on risk factors and findings
  - STI testing
  - Transvaginal ultrasound if a mass is palpated, pain reproduced or limited pelvic exam
  - Endometrial biopsy if suspicion for chronic endometritis

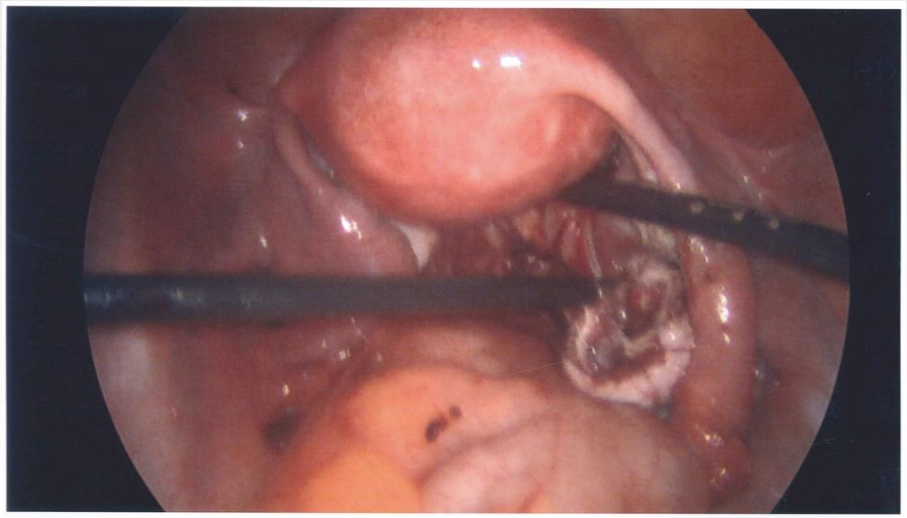
Endometriosis

- Endometrial tissue that grows outside the uterus
  - Often involves the pelvic tissue, ovaries and fallopian tubes
  - Can affect nearby organs, including the bowel and bladder
- Endometriosis occurs in about 1 in 10 women of reproductive age[1]
- Typical symptoms are pain with menses and intercourse. Some women have no symptoms

[1]Endometriosis. ACOG FAQ. https://www.acog.org/womens-health/faqs/endometriosis. Accessed 3/29/23.

Diagnosis of Endometriosis

- Can only be definitively diagnosed with laparoscopy
- That does not mean one cannot initiate treatment for suspected endometriosis



Consider Non-Reproductive Tract Conditions

- Bladder
  - Bladder spasm
  - Interstitial cystitis
- Gastrointestinal
  - Irritable bowel disease
  - Diverticulitis
- Mood disorders
  - Depression
  - Anxiety

- Tools you can use
  - Interstitial Cystitis Symptom Index
  - Irritable Bowel Severity Scoring System
  - GAD-7
  - PHQ-9

Initial Therapy

- Alleviate symptoms
- Target the cause (if known)
- Shared decision making
  - Do they want to become pregnant?
  - How important is a definitive diagnosis?
  - How and when to re-evaluate the plan of care?

Pharmacologic Management of Pain

- "Opioids are not recommended for the treatment of chronic pelvic pain" (ACOG Practice Bulletin 218, March 2020)
- NSAIDs can be effective alone or in combination with other treatments
- Consider neuropathic pain medicines
  - SSRI
  - SNRI
  - Tricyclic antidepressants
  - Gabapentin

Other Pharmacologic Approaches

- Hormonal
  - Oral contraceptives
    - Including continuous use
  - Progestins
    - Oral
    - Intramuscular and subcutaneous
    - IUDs

Other Treatments

- Pelvic floor physical therapy should be employed when pelvic floor tenderness is present
- Cognitive Behavioral Therapy
- Sex therapy
- Trigger point injection

Surgical Intervention

- Diagnostic laparoscopy
  - For definitive diagnosis of endometriosis
- Surgical excision of endometriosis
  - Becoming the evolving standard of surgical management
- Laparoscopic lysis of adhesions
  - “You can’t cut out pain.”
- Hysterectomy

Summary

- Chronic pelvic pain is common and often undertreated
- A trauma informed approach is essential
- A detailed patient history (supplemented with validated symptom questionnaires) often leads to the correct diagnosis and treatment plan
- Not all pelvic pain in gynecologic in origin

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