Chronic Pelvic Pain

MAJ Tammy Donoway, DO, Staff
CPT Elizabeth Goorley, DO, PGY-3
CPT Blake Busey, DO, PGY-3

Womack Army Medical Center
Family Medicine Residency

Disclosures

- We have no conflicts of interests to report.
- Our views and this presentation are not necessarily the views or the position of the United States Army.
- This presentation is for academic and professional purposes only.

Objectives

- Primary Care Provider opinion on CPP
- Definition of Chronic Pelvic Pain
- Epidemiology
- Differential diagnosis
- Evaluation
- Treatments
- Osteopathic approach to CPP
- Summary

Case

- 26 year old female presents for evaluation and treatment of chronic pelvic pain
- Constant pain in the pelvis and perineum for over one year.
- Exacerbating factors include:
  - Sitting, standing, walking, Valsava maneuvers, sexual activity
- Pain relieved by:
  - Norco and Valium

CPP in Primary Care

- As many as 40 percent of women who present to primary care practices with chronic pelvic pain have more than one diagnosis. [5]
- Women with chronic pelvic pain usually want the following:
  - to receive personalized care from their physicians;
  - to be taken seriously
  - to receive an explanation for their condition (more so than a cure)
  - to be reassured

Background

- CPP has prevalence similar to back pain and asthma.
- Little is known about how primary care providers manage this problem.
- Many Primary care providers feel uncomfortable with the management of CPP.[18]

CHRONIC PELVIC PAIN

- Difficult to diagnose
- Difficult to treat
- Difficult to cure

Definition

- Chronic pelvic pain (CPP) refers to pain of at least six months' duration that occurs below the umbilicus and is severe enough to cause functional disability or require treatment.[1]

1996 Study in the United States

- 15% of women indicated they had experienced either constant or intermittent pelvic pain during the preceding six months
- Estimated the cost of outpatient medical visits associated with chronic pelvic pain to be $880 million per year
- 15% of women with chronic pelvic pain reporting lost time from paid work
- 45% reporting decreased productivity at work.[2]

Incidence

- Affects 15-20% of women of reproductive age
- Accounts for 20% of all laparoscopies
- Accounts for 12-16% of all hysterectomies
- Associated medical costs of $3 billion annually

BMJ. 2006 April 1; 332(7544): 749–755.

Demographics

- Age
- Race
- Ethnicity
- Education
- Socioeconomic status
- Marital status
- History of abuse

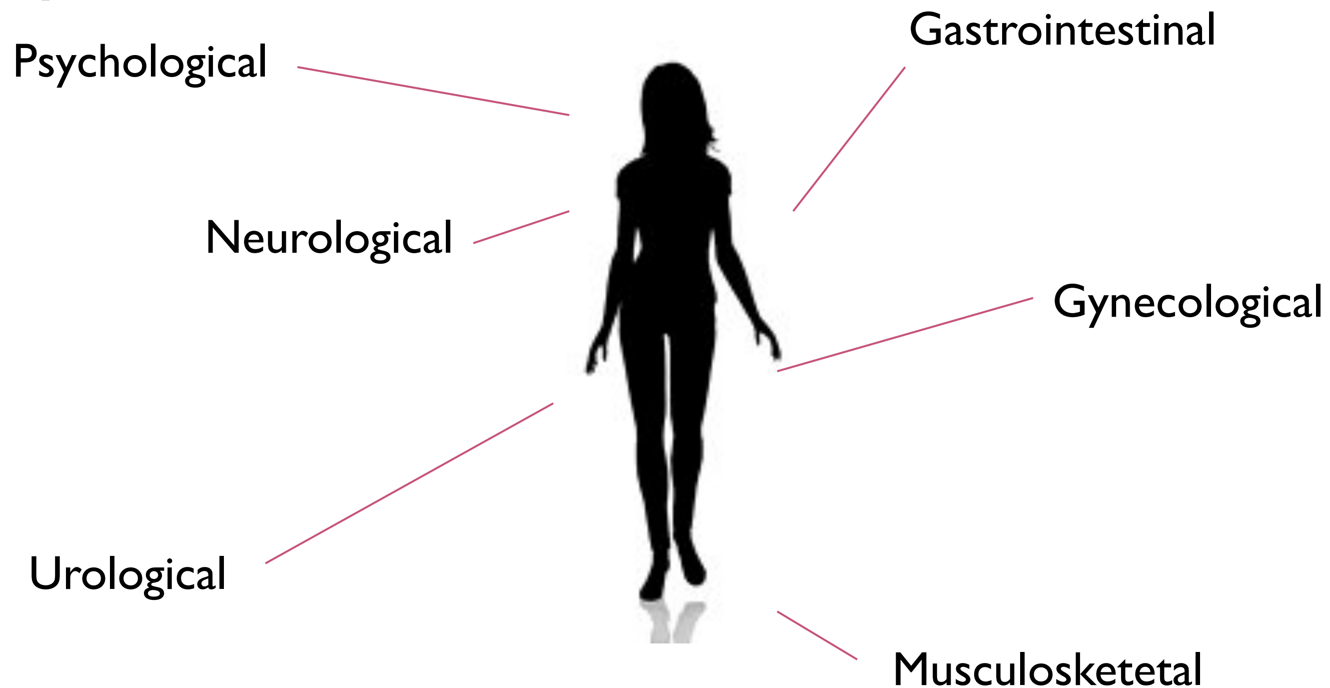
Demographics, Continued.

- History of spontaneous abortions
- Active duty military
- Previous surgery (non-gynecologic)
- Previous somatic complaints
- Higher number of sexual partners

Demographic and historic variables in women with idiopathic chronic pelvic pain. Obstet Gynecol. 1990 Mar ;75(3 Pt 1):428-32.

Etiology

- A definitive diagnosis is not made for 61 percent of women with chronic pelvic pain[4]

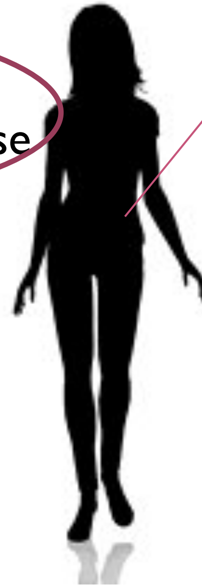


Etiology

- A definitive diagnosis is not made for 61 percent of women with chronic pelvic pain[4]

Gynecological

- Endometriosis
- Chronic pelvic inflammatory disease
- Pelvic Adhesions
- Pelvic Congestion
- Adenomyosis
- Ovarian Remnant Syndrome
- Residual Ovary Syndrome



- Leiomyoma
- Endosalpingiosis
- Neoplasia
- Fallopian tubal prolapse
- Tuberculous salpingitis
- Benign cystic mesothelioma
- Postoperative peritoneal cysts

Etiology

- A definitive diagnosis is not made for 61 percent of women with chronic pelvic pain[4]

Psychological

- Somatization
- Substance abuse
- Physical and sexual abuse
- Depression
- Sleep disorders

Etiology

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Urological

- Interstitial cystitis
- Painful bladder syndrome
- Recurrent UTI
- Urethral diverticulum
- Chronic urethral syndrome
- Neoplasia
- Radiation cystitis

Etiology

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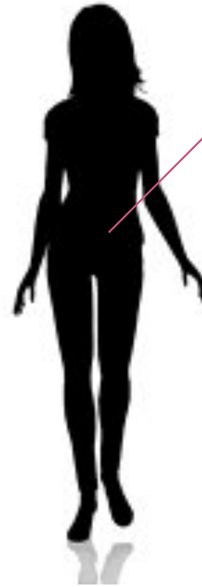
Gastrointestinal



- Irritable bowel syndrome
- Inflammatory bowel disease
- Diverticular colitis
- Neoplasia
- Chronic constipation
- Celiac disease

Etiology

- A definitive diagnosis is not made for 61 percent of women with chronic pelvic pain[4]

Musculosketetal

- Pelvic floor myalgia
- Myofascial pain
- Coccygodynia
- Piriformis syndrome
- Hernia
- Abnormal posture
- Figromyalgia
- Peripartum pelvic pain syndrome

Etiology

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Neurological

- Neuralgia
- Herniated nucleus pulposis
- Neoplasia
- Neuropathic pain
- Abdominal epilepsy
- Abdominal migraine

- Duration
- Nature
- Location
- Modifying factors
- Timing of the pain
- Detailed medical and surgical history

Extensive review of systems…

- Gynecologic
- Gastrointestinal
- Urologic
- Musculoskeletal
- Psychological

Physical Exam

- Abdomen
- Anterior abdominal wall
- Pelvic Floor Muscles
- Vulva
- Vagina
- Urethra
- Cervix
- Viscera – uterus, adnexa, bladder
- Rectum
- Rectovaginal septum
- Coccyx
- Lower Back/Spine
- Posture and gait

A bimanual examination, alone, is not sufficient to fully evaluate pelvic pain!!

Diagnostic Studies

- Lab Tests
  - Beta HCG
  - CBC
  - UA/culture
  - ESR
  - GC
  - Chlamydia

- Special Tests
  - Age Appropriate Cancer Screening
  - Transvaginal U/S
  - MRI/CT
    - If abnormal U/S
  - Referral for laproscopy

Chronic Pelvic Pain

Etiology: United Kingdom Primary Care Database

Diagnosis Distribution

Gastrointestinal	37.7%
Urinary	30.8%
Gynecological	20.2%

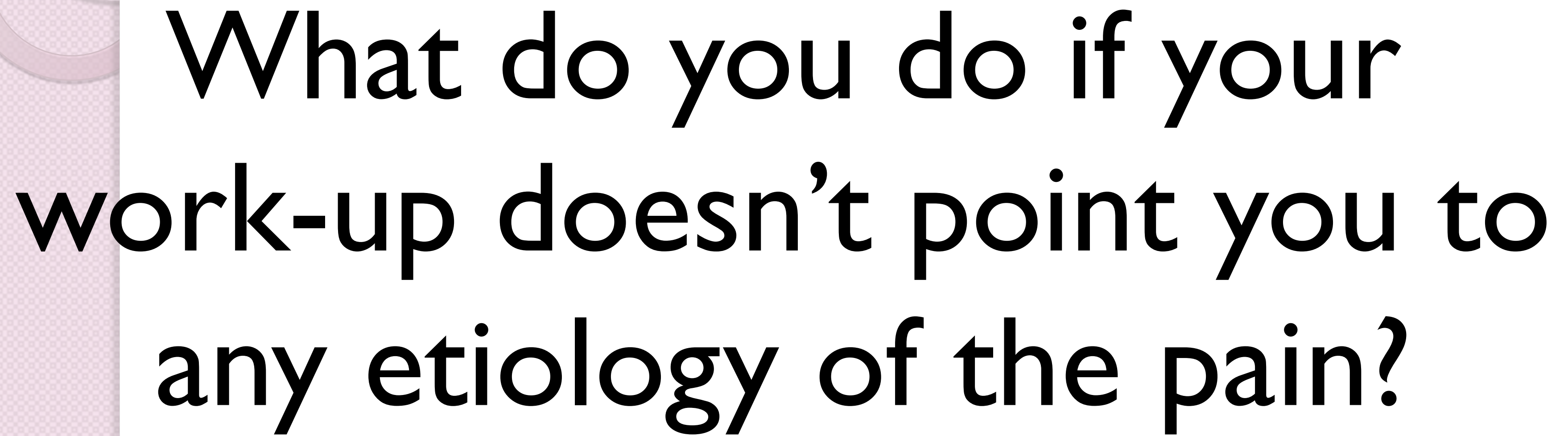
- 25-50% of women had more than one diagnosis
- Severity and consistency of pain increased with multisystem symptoms
- Most common diagnoses:
  - endometriosis
  - adhesive disease
  - irritable bowel syndrome
  - interstitial cystitis

Diagnosis

- Retrospective cohort analysis from 136 general practices in the UK
- The most common diagnoses given to women with chronic pelvic pain
  - cystitis (31%)
  - irritable bowel syndrome (29%)
  - pelvic inflammatory disease (10%)

Treatment

- Directed at the underlying cause of pelvic pain
- Multidisciplinary approach has been shown to improve outcomes
  - Social
  - Environmental
  - Psychological
  - Nutritional


What do you do if your work-up doesn't point you to any etiology of the pain?

National Guideline Clearinghouse General Treatment of CPP

- Interventions and Practices Considered
  - Paracetamol
  - NSAIDS
  - Antidepressants (TCA)
  - Anticonvulsants
  - Topical capsaicin
  - Opioids
  - Nerve blocks
  - Transcutaneous electrical nerve stimulation
  - Neuromodulation

National Guideline Clearinghouse- General Treatment of CPP

Agent	Pain Type	LE	GR	Comment
Paracetamol	Somatic	Ia	A	Based on arthritic pain
NSAIDs	Inflammatory mechanism	Ia	A	Good evidence
	Central mechanism	Ia	A	No good evidence
Antidepressants	Neuropathic	Ia	A	Effective
Anticonvulsants	Neuropathic/ Fibromyalgia	Ia	A	Effective
Gabapentin	CPP	2b	B	Effective
Topical Capsaicin	Neuropathic Pain	Ia	A	Some evidence of benefit
Opioids	Chronic Non-Malignant Pain	Ia	A	Benefit in small number of patients
Nerve Blocks		3	C	Role in broad management plan
TENS Unit		Ia	A	No good evidence

Treatment

- Combined oral contraceptives
- Oral medroxyprogesterone acetate (Provera)
- Depo-medroxyprogesterone (Depo-Provera)
- NSAIDs
- GnRH agonists (i.e. Goserelin/Zoladex)
- Levonorgestrel intrauterine system (Mirena)
- Danazol

Other treatment options for CPP

- Vitamin B1 and magnesium
- Neurontin (gabapentin)
- Elavil (amitriptylline)
- Surgery (Lysis of adhesions)
- Nerve blocks/nerve stimulation
- OMT
- Referral

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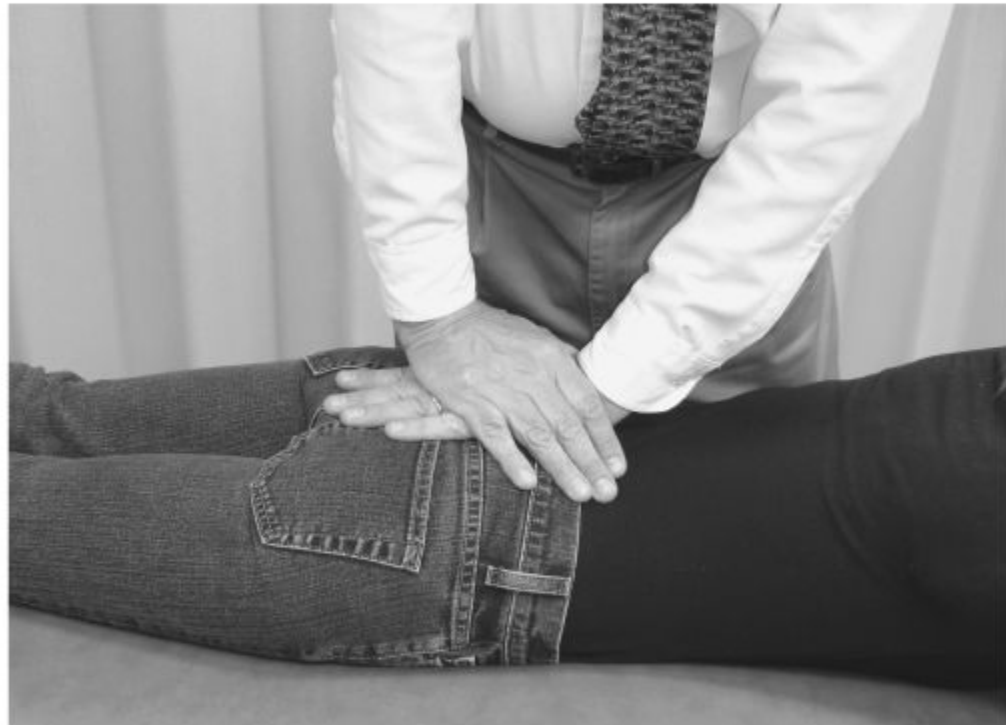
Osteopathic Approach

- Integration into the initial exam
- Central Facilitation
- Viscerosomatic/Somatovisceral Considerations
  - Tissue changes as manifestations of dysfunction
    - Ovaries T10-11, Splanchnic S2-4
    - Uterus T9-L2, Splanchnic S2-4
    - Fallopian tubes T10-L2, Vagus (lateral half)
    - Cervix Splanchnic S2-4
  - Somatic dysfunction facilitates increased efferent
  - Treatment of visceral vs. somatic component

Dysmenorrhea

- Uterine Tone
  - Sympathetic- contraction
  - Parasympathetic- relaxation

- Sacral Inhibition
  - Prone
  - Hands as shown
  - Lock elbows and apply downward force (as much as tolerated by patient)
  - Hold for 1-2 minutes minimum
  - Gradually release pressure
  - Repeat as necessary



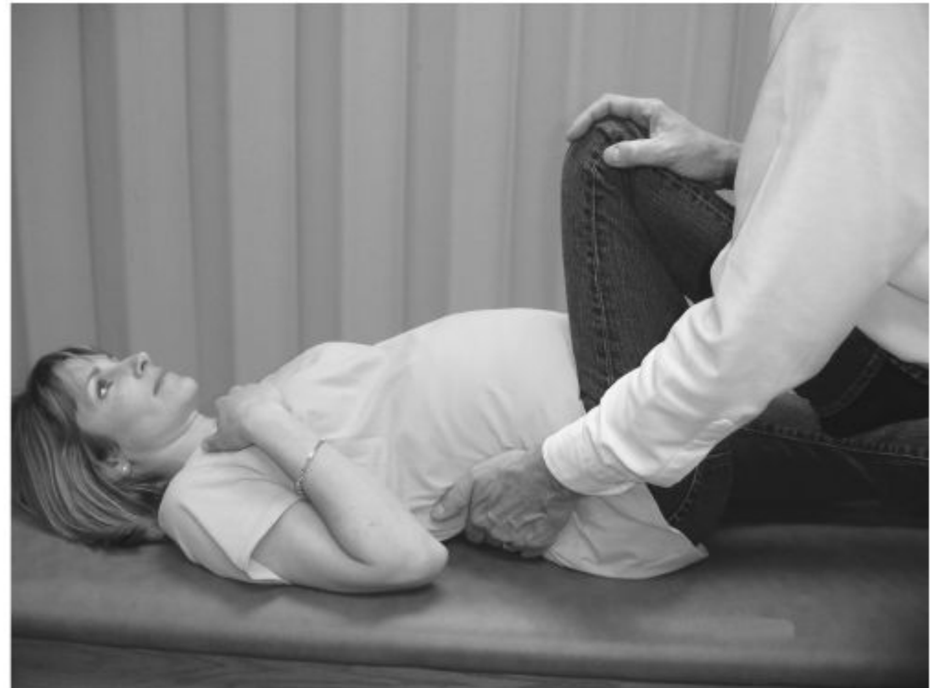
General OMT Considerations

- (Ilio-)Psoas
  - Nervous supply: Anterior branches of the lumbar plexus L1-3
  - Origin: T12-L5
  - Attachment: Medial iliac crest and lesser trochanter
- Sacroiliac and Iliosacral dysfunction
  - Splanchnic
- Pubic Symphysis Dysfunction
  - Specific pubic symphysis pain
- Lumbar dysfunction
- Leg Length Discrepancies

Indirect Psoas Release

- Goal- reduce hypertonicity and somatovisceral reflexes

- Monitor: Lumbar paraspinal
- Flex knee and hip to 90 degrees and fine tune
- Sense paravertebral tension changes and dissipation
- Lower leg to neutral and reengage if tension returns



Symphysis Pubis Sheer

- Goal- Improve motion between the pubic symphysis
- May monitor pubic symphysis
- Supine, knees at 90 degrees
  - Alternatively, the foot on the superior pubic sympysis side may be further inferior
- Patient adducts against arm for 3-5 seconds, then rest
- Repeat 4-6 times

Pregnancy Considerations

- Please attend the workshop with Dr. Morris and me this afternoon
- Changes in pregnancy alter spinal dynamics
  - Transitional zone now T8-11
  - Widened gain
  - Increased weight exaggerate leg length discrepancies
  - Limited diaphragmatic excursion
  - Increased interstitial fluid
- OMT in pregnancy reduces back-specific deterioration in function

Approach to the Pregnant Patient

- Gait
- Evaluate for asymmetry of landmarks
- Standing and seated flexion tests
- Seated TART changes
- Prone Sacral sulci and inferior lateral angle
- Supine innominate diagnosis +/- cranio-sacral assessment

Infertility

- JAOA October 2012 Article
  - 10 infertile couples
  - Manual techniques to release fascial restrictions, mobilize tight ligaments, drain congested lymphatics
  - 1-6 sessions of pelvic manipulation
    - Muscle Energy
    - Lymphatic Drainage
    - Visceral Manipulation
  - 6 couples conceived within 3 months
    - All delivered at Full Term

Take home points……

- Many women with CPP have more than one etiology.
- Many primary care providers are uncomfortable managing CPP.
- Evaluation of CPP should be THOROUGH…
- Treatment should be multi-disciplinary.
- OMT can help alleviate CPP.

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References

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