Evaluation and Treatment of Chronic Pelvic Pain

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Disclosures:

- None
Objectives:

- **Broad:**
  - Chronic Pelvic Pain (CPP) is a common complaint in the outpatient setting
  - A personalized approach to care may improve patient satisfaction

- **Specific:**
  - Review possible etiologies
  - Review initial patient assessment in the setting of CPP
  - Describe commonly used initial multimodal treatment plans

- **Osteopathic Principles and Practices:**
  - Evaluation and treatment of CPP is based on the understanding of the body as a unit. Recognizing the combination of mind and spirit while developing a comprehensive treatment plan may improve overall care.
Definition

- Persistent, noncyclic pain perceived to be in structures related to the pelvis and lasting more than six months
  - No consensus
  - 3-6 months to allow for any acute process to resolve
  - Unrelated to pregnancy
  - May be constant or episodic
  - Severe enough to cause functional disability or require treatment
Definition

- Chronic regional pain syndrome and/or functional somatic pain syndrome
  - May be more than one etiology

- Frequently associated with mental health disorders
Background

- Prevalence of 3.8%
  - May be as high as 16% based on inclusion criteria

- Anywhere from 10-25% of office visits

- Direct and indirect cost of over 3 billion dollars annually

- Main indication for significant surgery
  - Approximately 20 percent of hysterectomies
  - 40 percent of gynecological laparoscopies
Patient Experience

- 65% not given a specific diagnosis
- 31% given a gynecologic diagnosis
- 4% given a non-gynecologic diagnosis
- 30% actively seek treatment

- 1.6 average gynecology visits yearly
- 0.8 average PCP visits yearly
- 0.14 average mental health specialist visits yearly
Patient Experience:

- Relentless and overwhelming pain
- Unpredictable outcomes
- Struggle to construct pain as normal vs pathological
- Find a culture of secrecy exists
- Higher pain catastrophizing associated with reduced quality of life
Etiologies

- Prevalence in your practice
  - Specialty focus
  - Referral patterns
  - Population
- Many etiologies possible
- One condition could be worsening another
  - May have greater pain
- Specific entity may not be identified
  - Frustrating for you and the patient
Etiologies: Gynecologic

- Adenomyosis
- Adhesions
- Chronic endometritis
- Endometriosis
- Leiomyomata
- Ovarian cysts
- Ovarian remnant syndrome
- Ovulatory pain
- Pelvic congestion syndrome
- Pelvic inflammatory disease
- Salpingitis
Etiologies: Urologic

- Bladder neoplasm
- Chronic urinary tract infection
- Detrusor dyssynergia
- Interstitial cystitis
- Radiation cystitis
- Urethral diverticulum
- Urethral caruncle
- Urolithiasis
Etiologies: Gastrointestinal

- Chronic intermittent bowel obstruction
- Colitis
- Constipation
- Diverticular disease

- Hernia
- Inflammatory bowel disease
- Irritable bowel syndrome
Etiologies: Musculoskeletal

- Abdominal wall myofascial pain
- Chronic coccygeal pain
- Compression of lumbar vertebrae
- Degenerative joint disease
- Disk herniation
- Fibromyalgia
- Muscle strain
- Pelvic floor muscle spasms
Etiologies: Gynecologic

- **Endometriosis**
  - Most common at time of laparoscopic for CPP
  - 1/3 diagnosed at time of surgery (as high as 70% specialty practice)

- **PID: 30% may develop CPP**
  - Persistent tenderness after 30 days
  - Severity of adhesive disease
  - Mechanism not known
Etiologies: Gynecologic

- Adhesions
  - Not well understood

- Pelvic congestion syndrome
  - Controversial

- Adenomyosis
  - Typically age 40-50
Etiologies: Gynecologic

- Ovarian cancer
  - Not a ‘silent killer’

- Ovarian remnant syndrome
  - After surgical resection

- Leiomyoma
  - Pressure symptoms
  - Degeneration
Etiologies: Urologic

- IC
  - Common

- Urethral diverticulum
  - May palpate suburethral mass

- Bladder neoplasia
  - May present as IC
Etiologies: Gastrointestinal

- IBS
  - 10% population
  - 35% women CPP in primary care setting
- Inflammatory bowel disease
  - Crohns, UC
- Diverticular disease
  - Less common
- Colon cancer
- Chronic pseudo obstruction
- Celiac disease
Etiologies: Musculoskeletal

- Fibromyalgia
  - Poorly understood
- Coccydynia
  - Levator ani spasm
- Chronic abdominal wall pain
  - Muscle/nerve
  - 7-9% post Pfannenstiel
- Myofascial pain syndrome
  - Point and referred tenderness
- Osteitis pubis
  - Aggravated by movement
Etiologies: Mental Health

- Somatization
  - Nonspecific
- Opiate dependency
  - Decreased opioid response
- Abuse
  - Up to 47% disclose a hx

- Depression
  - More frequently in CPP
- Sleep disorders
  - Related to CPP
Initial Assessment

- Extremely detailed history
- Focused examination
- Obtain records when able
- Set plan
  - Patient engagement very important
- Alarm findings require urgent evaluation
History

- Stepwise approach
- Data gathering before the visit
- Standardized questionnaires
  - IPPS in English, Spanish, French and Portuguese
- May need dedicated visit for history alone
  - Multiple visits
  - Exam on subsequent follow-up
History: Pain Characteristics (PPQRST)

- Provocative/palliative factors
  - Oral intake
  - Urination/defecation
  - Positional changes
- Quality
  - Type and severity
- Radiation
- Setting
  - Menstrual
- Temporal
  - Pre/post
  - Events
History

- Associated symptoms
  - Bowel/urinary complaints
  - Myofascial symptoms
  - Sexual symptoms
  - Autonomic symptoms

- Mental health concerns
  - Known diagnosis
  - Sleep disorders
  - Prior abuse
  - Substance dependency
Physical Examination

- Essential
- May be painful/distressing
- May need staged approach for severe cases
- Not limited to pelvic examination
Physical Examination: General

- Observe gait if able
- Begin seated
  - Spine, lower back, pelvis, lower extremities
  - Abdominal wall
- Supine
  - Pelvis, abdominal wall, lower extremities
- Light, deep palpation
- Pinprick, soft touch
Physical Examination: Pelvis

- Visual inspection
- Sensory testing
  - Cotton swab test
- Assessment of pelvic floor
  - Focusing on muscle tone, point tenderness
  - Vaginal fornices
  - Cervical tenderness
- Bimanual
  - Uterine tenderness
  - Masses
  - Rectovaginal
- Speculum
  - Inspection
  - Wet mount/culture
Diagnostics

- Targeted evaluation
  - Transvaginal ultrasound (if tolerated)
  - MRI
    - Deep infiltrating endometriosis
- Laboratory evaluation
  - Blood
  - Urine
  - Cultures
Further Assessment

- Surgical
  - Role of laparoscopy controversial
  - Cystoscopy
  - Colonoscopy

- Referral
  - Find the best fit
  - Discuss and circle back with patient
Initial Treatment: Pharmacology

- NSAIDs
- Hormonal Treatment
- Gonadotropins agents
- Neuropathic modulators
- Antidepressants
- Novel agents
Initial Treatment: Pharmacology

- **NSAIDs**
  - None more superior
  - Acetaminophen for synergy
  - Side effect counseling
    - Ibuprofen 800 mg Q8
    - Naproxen 500 mg Q12
    - Mefenamic acid 250 mg Q6
  - 4-6 week trial

- **Combination Hormonal Contraceptives**
  - Cyclic or noncyclic
  - Oral or transdermal
  - With NSAIDS
  - 8-12 week trial
Initial Treatment: Pharmacology

- Medroxyprogesterone acetate
  - 10 mg daily, up to 50 mg
  - Side effect counseling
- Norethindrone acetate
  - 2.5 mg daily, up to 30 mg
- Subcutaneous depo-medroxyprogesterone acetate
  - 104 mg Q3 months
- Etonorgestrel Implant
- Levonorgestrel-releasing intrauterine system
  - 2 available
Initial Treatment: Further Pharmacology

- Leuprolide acetate
  - Gonadotropin releasing hormone agonist
  - 3.75 mg IM Q4 weeks
  - 11.25 mg IM Q12 weeks
  - Side effect counseling and addback therapy

- Danazol
  - 200 to 400 mg/day total divided into two doses
  - Increased to a total dose of 800 mg/day
  - Continued uninterrupted for two months and used up to 9 months
  - Side effects counseling
Initial Treatment: Further Pharmacology

- Cimetidine
  - 300 mg BID
- Hydroxyzine
  - 25 mg QHS, up to 100 mg
- Amitriptyline
  - 25-50 mg QHS
- Pentosan
  - 100 mg TID
- Hyoscyamine
  - 0.125 mg Q4 prn
- Botulinum toxin
- Tigger point injections
- Topical lidocaine
Initial Treatment: Further Pharmacology

- Aromatase inhibitors
  - Letrozole 2.5 mg daily
  - Side effect counseling and addback
- Gabapentin
  - 100 mg QHS start
- Cyclobenzaprine
  - 5-10 mg start
- SNRI (duloxetine)
  - 30 mg start, up to 60 mg goal
- Bupropion
  - 150 mg ER daily
- Trazadone
  - 25-50 mg QHS, up to 200 mg/day
Future Agents

- Elagolix
  - 150 mg once daily
  - 200 mg twice daily
- Cyclosporin A (IC)
- Capsaicin topically
- Modified sodium channel blockers
- Cannabinoids
- NMDA antagonist
- Recombinant humanized monoclonal antibody targeting NGF
A chance to cut MAY or MAY NOT be a chance to cure

- Extirpative surgery
  - Some will seek hysterectomy and/or oophorectomy
  - Many present after multiple laparoscopies
  - Expectations should be managed
  - Reserve mostly for high suspicion of disease
  - Elective intervention can be supported if relationship has been established
  - Experienced providers
    - Multispecialty if needed on standby
Initial Treatment: Non Pharmacologic

- Pelvic physical therapy
- Psychosocial counseling
  - Cognitive behavioral therapy
- TENS
- Dietary modification
  - IC
  - IBS
Complementary and Alternative Medicine

- Over half of women with CPP with have used at least one approach in the past year
  - Many will continue to utilize
- High interest amongst the public
- Allow multimodal approach along side standard treatments
Mind/Body Connection

- Yoga
  - Reduction in pain and improved quality of life
  - Feasible in most patients
- Massage
  - Enhanced with aromatherapy
- Mindfulness Meditation
  - Improved quality of life
- Acupuncture
  - Insufficient evidence
Osteopathic Manipulative Treatments

- Data is lacking
- Systemic Review 2016
  - Low study number and heterogeneity prevented indication of treatment effects
- Pilot Study 2016
  - 22/28 completed treatment
  - 17 had positive treatment effect
Patient Satisfaction

- Known to be improved with:
  - Collaborative decision making
  - Legitimizing their experience

- Embodiment of knowledge through community

- Clear follow up plan and next steps
Need for Research

- Quality studies
- Randomized, controlled
- Current gaps
  - Diagnostic criteria validation
  - ID of subpopulations
  - Risk factors/comorbid conditions
  - Role of surgery
  - Placebo effect
What’s Next: Central sensitization

- Dysfunctional sensory processing recognized as a systemic disease
- Central pain generators (pain originating from CS) and peripheral pain generators (pain from local tissue damage)
- Explanation for difference in pain amongst patients with similar entities
- Most commonly involves
  - Endometriosis
  - IC
  - Vulvodynia
  - Myofascial pain syndrome
  - IBS
  - Primary dysmenorrhea
What’s Next:

- Neuromodulation
- Surgical techniques
- Novel medications
- Integrative medicine
  - Dietary and supplement modification
Summary

- CPP is a common complaint
- Comprehensive history and physical exam
- Establish patient engagement and expectations
- Diagnosis specific treatment if able
- Refer and consult as needed
- CAM
- Osteopathic philosophy
- Remember self care as provider
Resources for patients

- ACOG patient information handouts, FAQ
- Pelvicpain.org
- Ichelp.org
- MISforwomen.org
- Reproductivefacts.org
- Womenshealth.gov
Thank you!
References:

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