An Integrative Approach to Caring for Women with Chronic Pelvic Pain

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Objectives

- Define chronic pelvic pain (CPP) and identify the most common causes of CPP.
- Conduct a comprehensive holistic assessment of the sources of pain in women with CPP.
- Identify the importance of myofacial manifestations of pain and how they are treated.
- Explore the difference between treating acute and chronic pain and how to employ a variety of different treatment modalities that treat the whole person.

Integrative Medicine

- The practice of medicine that reaffirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by evidence, and makes use of all appropriate therapeutic approaches, healthcare professionals and disciplines to achieve optimal health and healing.”—Consortium of Academic Health Centers for Integrative Medicine
- Combines mainstream medical therapies with CAM therapies for which there is some high-quality scientific evidence for safety and effectiveness. NCCAM

Disclosures

- I have no disclosures
- I will discuss off-label use of drugs.
**Chronic Pelvic Pain Definition**

- “Continuous or episodic pain in the lower abdomen or pelvis lasting ≥6 months and associated with a negative impact on quality-of-life” (Williams, et al., 2004)
- Definitions vary greatly throughout the clinical and research literature.
- Can be classified as cyclic or noncyclic
  - Seldom fits into those categories clinically

**Chronic Pelvic Pain**

- **Prevalence 12-39%**
- **Medical Care**
  - 20% of all referrals to gynecologists
  - >40% of all laparoscopies
  - 12% of all hysterectomies
- **Costs to Society**
  - $882 million in outpatient visits alone
  - 15% time lost from work
  - 45% reduced productivity
  - Total costs estimated at > $2 billion / yr

Howard FM. Obstetrical and Gynecological Survey 1993;48:357-87.

**Overview of CPP**

- Affects physical and sexual function, and emotional well-being
- Can severely impact quality of life
- Multiple systems interact and contribute to the pathophysiology of CPP
- In many cases a direct cause of CPP cannot be identified
- Increased risk of a history of abuse, depression, and anxiety, which exacerbates painful symptoms

**Case History**

- 35 yo with crampy lower abdominal pain x 3 years
- Daily pain 3/10, worsens to 8/10 twice a week
- Limits activities (including sex), enjoyment of life
- Worse with her period
- Pain with intercourse
- Has constipation with bloating
- Urinary frequency
ASSESSMENT

- No standard diagnostic criteria or standard method of evaluating patients
- Proceed in a holistic systematic manner assessing for all sources of pain: physical, emotional and spiritual

Components of the CPP History

- Pain history/diary:
  - quality, location, timing with cycle, contributing or relieving factors, body map
- Medical/surgical history including Rx's
- Ob/Gyn:
  - menstrual history
  - sexual history
- GI symptoms/pain
- Urinary symptoms: IC screening
- Quality of life/coping
- Health habits:
  - substance abuse
  - nutrition/exercise
- Review records:
  - surgery
  - diagnostic tests

Assess Quality of Life

- Assess impact on functioning and quality of life (scale of 1 to 4)
  - In the past month, how much has your pelvic pain kept you from doing your usual activities such as self-care, work or recreation?
  - How much has your pelvic pain interfered with your quality of life?
  - How much has your pelvic pain interfered with your normal or regular sexual activity?
  - How much have the treatments you have received for your pelvic pain improved your quality of life?
- How do you cope with your pain?
- How does your partner, family etc. respond when you are in pain?

Needs of CPP Patients

- Receive legitimization of their pain from a health care professional
- To be heard during the patient contact visit
- To have support in numerous forms
- To take personal responsibility for one's health

Jarrell (2005), The Society of Obstetricians and Gynaecologists of Canada

See International Pelvic Pain Society Website for history and PE forms: English, Spanish, French
Emotional Health

- Elicit patient’s view of illness, fears and concerns
  - Do you have any thoughts or concerns about what might be causing the pain?
- Screen for current or prior physical or sexual violence, including events in childhood
- Screen for depression (12-35%)
  - During the past month, have you been bothered by little interest or pleasure in doing things?
  - During the past month, have you been bothered by feeling down or hopeless?
- Assess sexual functioning
  - Desire, frequency, satisfaction, orgasm and discomfort

Spiritual Health

- How do you connect with your spirit?
- What brings you joy?
- Who are the people you choose to be close to?
- What do you hope for?
- Where do you find strength?
- What brings you comfort when you are upset?

CPP Diagnostic Tests

<table>
<thead>
<tr>
<th>Test</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urinalysis and culture</td>
<td>Bladder symptoms suggestive of UTI</td>
</tr>
<tr>
<td>Wet mount, STI screening</td>
<td>Signs or risk factors for genital tract infection</td>
</tr>
<tr>
<td>ALT and creatinine</td>
<td>Taking multiple medications or concern for liver or kidney disease</td>
</tr>
<tr>
<td>TSH, CBC, FBS, Vitamin D</td>
<td>Depressive or constitutional symptoms</td>
</tr>
<tr>
<td>Pelvic sonogram</td>
<td>Bimanual exam limited or abnormal</td>
</tr>
<tr>
<td>CT and MRI</td>
<td>Other diagnostic studies are abnormal or inadequate</td>
</tr>
<tr>
<td>Laparoscopy</td>
<td>Persistent symptoms, infertility, large ovarian cysts, treatment of endometriosis or adhesions</td>
</tr>
<tr>
<td>Cystoscopy</td>
<td>Concern for IC or other bladder abnormalities</td>
</tr>
<tr>
<td>FOBT x 3 or referral for colonoscopy</td>
<td>GI symptoms or concern for colon cancer</td>
</tr>
</tbody>
</table>

Patients don’t really come to us because they are in pain, they come to us because they are suffering.

Ling, APS Conference 2010
**PHYSICAL EXAM**
- Identify underlying pathology
- Reproduce pain
- Establish trust and minimize fear

**Musculoskeletal Exam**
- Observe gait, posture, balance
- Examine hip flexibility and symmetry
- Palpate the abdomen for muscle tension, tenderness and trigger points
- Perform Q-tip or cotton swab test
- Examine pelvic floor muscles

*Don’t confine your exam to the gyn table*

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**Carnett’s Sign**
- Differentiates pain originating from the abdominal wall versus peritoneal cavity (Suleiman et al., 2001)
- The patient raises her head and shoulders from the examination table while the provider palpates the tender area on the abdomen.
- Positive Carnett’s sign: pain remains unchanged or increases when the abdominal muscles are tensed.

**Myofascial Trigger Points**
- Trigger points are hyperirritable palpable nodules that are taut bands of muscle fibers (Tough et al., 2007)
- When palpated the pain usually radiates to another location
- Found in abdominal wall, buttocks, hips, perineum and pelvic floor locations
- Major contributor to CPP

Myofascial Trigger Points

Q -Tip Test

- Purpose: identify and map changes in sensation including allodynia
- Gently touch with a q-tip
- Start at the thigh and work down to perineum bilaterally
- Include clitoris and perianal areas
- Proceed from labia majora to labia minora then the vestibule
- Record findings

Examining Pelvic Floor Muscles

Internal Pelvic Floor Examination

- Palpate in 3 layers with a single finger
  - Layer one (superficial)
    - First knuckle
    - Bulbocavernosus, ischiocavernosus, superficial transverse perineal
  - Layer two
    - Second knuckle
    - Urethral muscles, deep transverse perineal
  - Layer three (deep)
    - Third knuckle
    - Levator ani, coccygeus, piriformis, obturator internus

Gynecologic Causes

- Endometriosis
- Adenomyosis
- Adhesions entrap ovaries, tether pelvic organs
- Vulvodynia, vestibulodynia
- Pelvic congestion syndrome
- Ovarian remnant syndrome

DIAGNOSIS

- Gynecologic
- Gastrointestinal
- Urinary tract
- Musculoskeletal
- Psychological

DIAGNOSIS OF VULVODYNIA

- **Vulvodynia**
  - Generalized pain
  - Burning, stabbing, stinging, etc.
- **Chronic Vulvar Pain**
  - No visible findings
  - Erythema
  - Hyperalgesia
  - Allodynia
- **Vestibulodynia**
  - Pain at vestibule only
  - Provoked Burning
- **R/O**
  - Infectious, inflammatory, neoplastic, or neurologic cause
  - Treat accordingly
**Vulvodynia Treatments**

- Oral pain medications
  - TCA's, SNRIs
  - Anticonvulsants
  - Opioids
- Nerve blocks:
  - Subcutaneous, pudendal, caudal
- Psychotherapy
  - Coping/support
  - Communication
  - CBT
- Sex therapy/education
- Compounded formulations
- Hormones
- Pelvic floor therapy, biofeedback

**Gastrointestinal Conditions**

- Irritable bowel syndrome
- Inflammatory bowel disease, diverticular disease
- Hernias
- Cancer (rarely)

**Urinary Tract Conditions**

- Interstitial cystitis: painful bladder syndrome
- Infection: usually acute symptoms
- Kidney stones: usually acute symptoms
- Cancer (rarely)

**Diagnosis of Interstitial Cystitis**

- Pain related to bladder and urgency, frequency or nocturia
  - absence of objective evidence of another disease that could cause the symptoms
- PUF questionnaire, IC Symptom Index
- Cystoscopy and urodynamics recommended if diagnosis of IC in doubt
  - cystoscopy showing Hunner’s ulcer or glomerulations (nonspecific) on bladder wall
- Potassium sensitivity test not recommended

**Treatments for IC**

- Patient education and self care practices:
  - Bladder training
  - Dietary changes: acidic foods, artificial sweeteners, caffeine, alcohol
  - Stress management/stop smoking
- Oral medications: amitriptyline, cimetidine, hydroxyzine, pentosanpolysulfate
- Intravesical medications: DMSO, heparin, lidocaine
- Physical therapy/movement
MUSCULOSKELETAL MALADAPTATIONS

Hypertonus and tenderness common

MYOFASCIAL PAIN
LOW BACK, HIP, BUTTOCK, ABDOMINAL WALL, AND PELVIC FLOOR MUSCLE DYSFUNCTION

Inciting Pain Event: uterus, ovary, bowel, bladder, muscles, nerves

LOCAL MUSCLE TENSION

Secondary Muscle “Adaptations”: Lower back, buttocks, hips, pelvic floor

Initial Event Resolves (naturally or with treatment)

Hypertonus and tenderness are common

FEAR AVOIDANCE MODEL (CATASTROPHIZING)

Chronic pelvic pain

Disability

Disease

Depression

Avoidance

Painful experiences

Catastrophising

Fear of movement or injury

No fear

Confrontation

Recovery

EMOTIONAL PAIN

Address anxiety, depression and sexual pain

Psychological Morbidity

- Pain has impact on quality of life and functional capacity
- Women become isolated and relationships become strained
- Pre-existing psychological issues such as anxiety, depression, and PTSD exacerbated by pain
- Depression is common (22% Learman, 2011)
  - risk for suicide x2 for patients in pain (Tang, 2006),
  - prevalence of suicidal ideation 24% (Racine, 2014)

Sexuality Issues

- Dyspareunia is common
- Can lead to sexual dysfunction and strained sexual relationships
- 68% of women with CPP have sexual dysfunction
  - Hypoactive desire 54%
  - Arousal disorder 33%
  - Orgasmic disorder 22%
  - Sexual pain 74%

(Verit, Verit, & Yeni, 2006)

Which Patient Has More Pain?

- Patient A
  - Depressed
- Patient B
  - Not Depressed

TREAT CHRONIC PAIN AS A CONDITION

Central Sensitization
Body continues to experience pain despite healing from a precipitating injury

Pain in the setting of no known pathology

Definition: “an amplification of neural signaling within the central nervous system that elicits pain hypersensitivity” (Woolf, 2011).

Body continues to experience pain despite healing from a precipitating injury

Pain in the setting of no known pathology

Chronic pain is a condition

Central Sensitization

- CNS perpetuates pain by demonstrating exaggerated or prolonged responses to painful stimuli this is referred to as “windup”
- Reduced capacity for inhibition
- Occurs in many CPP disorders such as vulvodynia (Zhan, 2011), dysmenorrhea (Bajaj, 2002), and endometriosis (He, 2010)
**TREATMENT**

- Improve quality of life
- Improve functional status
- Decrease pain

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**Therapeutic goals**

- Identify and treat physical and psychological morbidity
- Assist in the development of:
  - Positive coping techniques
  - Communication strategies
  - Problem solving skills
- Set realistic treatment goals
- Acknowledge and support woman
- Work with PCP to provide medication management
- Convene a multidisciplinary team

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**Treating Pain: Medications**

- Analgesics:
  - Opioids
  - NSAIDS
- Topical anesthetics*
- Antidepressants
  - Tricyclics*
  - SSRI's/SNRIs*
- Anticonvulsants
  - gabapentin
  - pregabalin

- Muscle relaxants
- Refer to pain management
  - nerve blocks
  - neurotoxin;
    - OnabotulinumtoxinA*
    - medication consult

*Off label use

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**Physical Therapy for Myofascial Pain**

- Refer patients to physical therapists specializing in pelvic floor myofascial work (advanced training)
  - Complete assessment
  - Myofascial release
  - Biofeedback
  - Home exercise program
    - Abdominal breathing, rescue poses, stretching exercises
    - Resource: YouTube videos in English and Spanish

See APT Women's Health Section website for referrals
Treatment for Trigger Points

- Ultrasound energy, manual therapy
- Local anesthetic injection
  - 93% success by 5th injection in abdomen (Kuan, 2006)
  - Lidocaine 1% x 10-15cc, bupivicaine 0.25% - 0.5% x 10-15cc

Integrative Approach

- Mind/body interventions: breathing exercises, imagery, MBSR, laughter yoga, etc.
- Movement therapies: yoga, Tai Chi, Feldenkrais, etc.
- Nutrition: anti-inflammatory diet/herbs, multivitamins, B complex, fish oil, calcium/magnesium, herbal adaptogens
- Alternative providers: TCM, craniosacral, chiropractic, energy medicine, strain/counter strain, etc.

Treating Sexual Pain

- Patient education
  - Learn about your body
    - Explore your pleasure spots
    - Educate your partner
  - Connect with your partner in sexual and non-sexual ways
  - Prepare for sex: relax the PF muscles, use lubricants, take time for arousal
  - Reinvent your sex life
  - Avoid painful activities
  - Refer to sex therapist or sexologist
  - Use patient education materials

Heather Howard, PhD Sexual Rehab.org

Clinical Pearls

- Set realistic goals with your patient: improved function vs. complete remission
- Have a systematic approach to assessment
- Be wary of the assumption pain is linked to pathology or obvious tissue damage
- Avoid opiates/Use medication contracts
- Work as an interdisciplinary team- build a community
- Have lots of tools in your tool kit
- Keep learning about innovative strategies
- Use group medical visits
In their own words

- “I thought I was the only one in the world with this [pain]... It was so good to hear other people’s experiences and help define what I had. I thought there was something terribly wrong [with me]. I feel very reassured that it’s something else people have and I’ve come to terms with the fact that it might never go away. I was always hoping that some day everything would be fine if I just did the right thing. But now it’s just everything being okay is all right.”
- “To find that other people have the same experiences and the feeling that you’re not alone. Everyone was able to share so well. I always felt comfortable. It just meant a lot.”
- “My experience was positive! I feel more in control of my own life now and I feel confident that I can improve (and possibly rid my condition).”

Answer

In addition to obtaining an NRS/VAS pain intensity score, what additional aspects of pain should be assessed?

a. Timing of pain with the menstrual cycle
b. Body map
c. Contributing and relieving factors
d. Quality, location and timing
e. All of the above

- If patient is unable to give an adequate pain history then she should keep a pain diary for 3-5 days to record the information above.

Interactive Question

What is allodynia?

a. Increased sensitivity to pain
b. Burning pain sensation
c. Pain from a non-painful stimulus
Answer

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Interactive Question

What underlying conditions might be present in a patient with dysparuenia?
- Endometriosis
- Vulvodynia or vestibulodynia
- Interstitial cystitis
- Pelvic floor muscle dysfunction
- All of the above

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Interactive Question

The following statements about CPP are true, except:
- It is defined as pain in the pelvis lasting >6 months.
- It is a complex condition that can involve many different organ systems.
- It affects quality of life including sexual function.
- It is commonly caused by acute pelvic inflammatory disease.
- It is best treated using a multidisciplinary approach.
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