Chronic Pelvic Pain

**Definition**

Chronic Pelvic Pain (CPP) is pain of apparent pelvic origin that has been present most of the time for the past six months

**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
- 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

Obtaining a COMPLETE and DETAILED HISTORY is the most important key to formulating a diagnosis

**Diagnosis: Obtaining the History**

**Gynecological Review of Systems**
- Associated with menses?
- Association with sexual activity? (Be specific)
- New sexual partner and/or practices?
- Symptoms of vaginal dryness or atrophy?
- Other changes with menses?
- Use of contraception?
- Detailed childbirth history?
- History of pelvic infections?
- History of gynecological surgeries or other problems?

**Gastrointestinal Review of Systems**
- Regularity of bowel movements?
- Diarrhea/constipation/flatus?
- Relief with defecation?
- History of hemorrhoids/fissures/polyps?
- Blood in stools, melena, mucous?
- Nausea, emesis or change in appetite?
- Abdominal bloating?
- Weight loss?

**Urological Review of Systems**
- Pain with urination?
- History of frequent or recurrent urinary tract infxn?
- Hematuria?
- Symptoms of urgency or urinary incontinence?
- Difficulty voiding?
- History of nephrolithiasis?

**Musculoskeletal Review of Systems**
- History of trauma?
- Association with back pain?
- Other chronic pain problems?
- Association with position or activity?

**Psychological Review of Systems**
- History of verbal, physical or sexual abuse?
- Diagnosis of psychiatric disease?
- Onset associated with life stressors?
- Exacerbation associated with life stressors?
- Familial or spousal support?

**Diagnosis: The 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 exam alone is NOT sufficient for evaluation*

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**Diagnosis: Objective Evaluative Tools**

**Basic Testing**
- Pap Smear
- Gonorrhea and Chlamydia
- Wet Mount
- Urinalysis
- Urine Culture
- Pregnancy Test
- CBC with Differential
- ESR
- **PELVIC ULTRASOUND**

**Specialized Testing**
- MRI or CT Scan
- Endometrial Biopsy
- Laparoscopy
- Cystoscopy
- Urodynamic Testing
- Urine Cytology
- Colonoscopy
- Electrophysiologic studies
- **Referral to Specialist**

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**Differential Diagnosis: Gynecological Conditions**

**Cyclical**
- Endometriosis
- Adenomyosis
- Primary Dysmenorrhea
- Ovulation Pain/ Mittleschmertz
- Ovarian Remnant Syndrome

**Non-cyclical**
- Pelvic Masses
- Adhesive Disease
- Pelvic Inflammatory Disease
- Pelvic Congestion Syndrome
- Symptomatic Pelvic Organ Prolaps
- Pelvic Floor Pain Syndrome
Pelvic Inflammatory Disease

**Description:** Spectrum of inflammation and infection in the upper female genital tract
- Endometritis/ endomyometritis
- Salpingitis/ salpingoophritis
- Tubo-ovarian Abscess
- Pelvic Peritonitis

**Pathophysiology:** Ascending infection of vaginal and cervical microorganisms
- Chlamydia and Gonorrhea (developed countries)
- Tuberculosis (developing countries)
- Acute PID usually polymicrobial infection

**Risk Factors**
- Adolescent
- Multiple sexual partners
- Greater than 2 sexual partners in past 4 weeks
- New partner in the past 4 weeks
- Prior history of PID
- Prior history of gonorrhea or chlamydia
- Smoking
- None or inconsistent condom use
- Instrumentation of the cervix

**Minimum Criteria (one required):**
- Uterine Tenderness
- Adnexal Tenderness
- Cervical Motion Tenderness
- No other identifiable causes

**Additional criteria for dx:**
- Oral temperature greater than 101
- Abnormal cervical or vaginal discharge
- Presence of increased WBC in vaginal secretions
- Elevated ESR or C-reactive protein
- Documented of CT

**Specific criteria for dx:**
- Pathologic evidence of endometritis
- US or MRI showing hydrosalpinx
- Laparoscopic findings consistent with PID
Treatment:

Multiple outpatient antibiotic regimens; total therapy for 14 days.

A) CEFTERIAXON 500 mg im single dose and doxycycline 100 mg twice daily plus metronidazole 400 mg twice daily.
B) ofloxacin 400 mg twice daily plus metronidazole twice daily.

Inpatient regimens in form of i.v. cefteriaxon 2g daily plus i.v. or oral doxycycline 100 mg BD followed by oral doxycycline 100 mg BD plus metronidazole 400 mg BD.

Surgical intervention

- Laparoscopy to confirm the diagnosis
- Drainage of abscess
- Treatment of concomitant diseases.

Sequelae

- Infertility
- Ectopic Pregnancy
- Chronic Pelvic Pain
- Occurs in 18-35% of women who develop PID
- May be due to inflammatory process with development of pelvic adhesions

Pelvic Congestion Syndrome

**Description:** Retrograde flow through incompetent valves venous valves can cause tortuous and congested pelvic and ovarian varicosities; Etiology unknown.

**Symptoms:** Pelvic ache or heaviness that may worsen premenstrually, after prolonged sitting or standing, or following intercourse

**Diagnosis:** Pelvic venography, CT, MRI, ultrasound, laparoscopy

**Treatment:** Progestins, GnRH agonists, ovarian vein embolization or ligation, and hysterectomy with bilateral salpingo-oophorectomy (BSO)

Pelvic Floor Pain Syndrome

**Description:** Spasm and strain of pelvic floor muscles

- Levator Ani Muscles
- Coccygeus Muscle
- Piriformis MIscle

**Symptoms:** Chronic pelvic pain symptoms; pain in buttocks and down back of leg, dyspareunia

**Treatment:** Biofeedback, Pelvic Floor Physical Therapy, TENS (Transcutaneous Electrical Nerve Stimulation) units, antianxiolytic therapy, cooperation from sexual partner
### Differential Diagnosis:

- **Urological** Conditions that may Cause or Exacerbate Chronic Pelvic Pain
  - Interstitial Cystitis
  - Radiation Cystitis
  - Urethral Syndrome
  - Detrusor Dyssynergia
  - Urethral Diverticulum
  - Chronic Urinary Tract Infection
  - Recurrent Acute Cystitis
  - Recurrent Acute Urethritis
  - Stone/urolithiasis
  - Urethral Caruncle
  - Bladder Carcinoma

### Interstitial Cystitis

**Description:** Chronic inflammatory condition of the bladder

**Etiology:** Loss of mucosal surface protection of the bladder and thereby increased bladder permeability

**Symptoms:**

- Urinary urgency and frequency
- Pain is worse with bladder filling; improved with urination
- Pain is worse with certain foods
- Pressure in the bladder and/or pelvis
- Pelvic Pain in up to 70% of women
- Present in 38-85% presenting with chronic pelvic pain

**Diagnosis:**

- Cystoscopy with bladder distension
- Presence of glomerulations (Hunner Ulcers)

**Treatment:**

- Avoidance of acidic foods and beverages
- Antihistamines
- Tricyclic antidepressants
- Elmiron (pentosan polysulphate)
- Intravesical therapy: DMSO (dimethyl sulfoxide)

### Differential Diagnosis:

- **Gastrointestinal** Conditions that may Cause or Exacerbate Chronic Pelvic Pain
  - Colitis
  - Chronic Intermittent Bowel Obstruction
  - Diverticular Disease
  - Irritable Bowel Syndrome
  - Colon Cancer
  - Constipation
  - Inflammatory Bowel Disease

### Irritable Bowel Syndrome (IBS)

**Description:** Chronic relapsing pattern of abdominopelvic pain and bowel dysfunction with diarrhea and constipation
**Prevalence**

- Affects 12% of the U.S. population
- 2:1 prevalence in women: men
- Peak age of 30-40’s
- Rare on women over 50
- Associated with elevated stress level

**Symptoms**

- Diarrhea, constipation, bloating, mucousy stools
- Symptoms of IBS found in 50-80% women with CPP

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**Rome II Criteria for Irritable Bowel Syndrome**

At least 12 weeks (need not be consecutive) in the preceding 12 months of abdominal discomfort or pain that has 2 of 3 features:

1. Relieved with defecation
2. Onset associated with a change in frequency of stool
3. Onset associated with a change in stool form or appearance

The following symptoms are not essential for the diagnosis, but their presence increases diagnostic confidence and may be used to identify subgroups of irritable bowel syndrome:

- Abnormal stool frequency (more than 3 per day or fewer than 3 per week)
- Abnormal stool form (lumpy, hard or loose, watery) in more than 25% of defecations
- Abnormal stool passage (straining, urgency, or feeling of incomplete evacuation) in more than 25% of defecations
- Passage of mucus in more than 25% of defecations
- Bloating or feeling of abdominal distention in more than 25% of days


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**Diagnosis based on Rome II criteria**
Treatment

- Dietary changes
- Decrease stress
- Cognitive Psychotherapy
- Medications
  - Antidiarrheals
  - Antispasmodics
  - Tricyclic Antidepressants
  - Serotonin receptor (3, 4) antagonists

Psychological Associations

- 40 – 50% of women with CPP have a history of abuse (physical, verbal, sexual)
  - Psychosomatic factors play a prominent role in CPP
  - Psychotropic medications and various modes of psychotherapy appear to be helpful as both primary and adjunct therapy for treatment of CPP
  - Approach patient in a gentle, non-judgmental manner
    - Do not want to imply that “pain is all in her head”

Conclusions

- Chronic Pelvic Pain requires patience, understanding and collaboration from both patient and physician
- Obtaining a thorough history is key to accurate diagnosis and effective treatment
- Diagnosis is often multifactorial – may affect more than one pelvic organ
- Treatment options often multifactorial – medical, surgical, physical therapy, cognitive