Chronic Pelvic Pain: Taking a Different Perspective

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Objectives

At the end of this presentation, the attendee will be able to:
1. List common non-gynecologic etiologies of pelvic pain.
2. Describe methods of evaluation for pelvic pain.
3. Explain the role of surgical and non-surgical treatments for pelvic pain.

Gynecologic Causes of Pelvic Pain

- Endometriosis
- Adhesions (PID/post-operative)
- Leiomyomata
- Adenomyosis
- Pelvic congestion syndrome
- Mittelschmerz
- Adnexal masses
Chronic Pelvic Pain vs. Chronic Lower Abdominal Pain

Non-gynecologic Causes of Pelvic Pain

- Gastrointestinal
- Urologic
- Musculoskeletal
- Psychologic
Gastrointestinal Causes of Pelvic Pain

- Irritable Bowel Syndrome (Rome Criteria)
- Chronic appendicitis
- Inflammatory bowel disease (Crohn's)
- Diverticulitis
- Diverticulosis
- Meckel's diverticulum

Urologic Causes of Pelvic Pain

- Interstitial Cystitis
- Urethral syndrome (chronic urethritis)
- Unstable bladder (detrusor instability)

Musculoskeletal/Myofascial Causes of Pelvic Pain

- Trigger Points
- Hernias (inguinal, femoral, umbilical, incisional, spigelian)
- Nerve entrapment (neuritis)
- Fasciitis
- Scoliosis
- Disc disease
- Fibromyalgia (Criteria?)
- Osteitis pubis
Psychologic Causes of Pelvic Pain

- DEPRESSION
- Anxiety
- Psychosexual dysfunction/abuse
- Hypochondriasis
- Somatization
- Personality disorder

Chronic Pelvic Pain Management Team: A Virtual Pelvic Pain Clinic

- Gynecologist
- Gastroenterologist
- Urogynecologist
- Muscle-ologist/physical therapist
- Psychologist/Psychiatrist

Traditional vs. Nontraditional Pelvic Pain Therapy

- N=106
- Standard vs. integrated approach
- Laparoscopy standard vs. not standard
- Organic cause priority vs. somatic / dietary / psychologic / physiotherapeutic / environmental
- 20% negative sexual experiences
Results of Treatment of Chronic Pelvic Pain in the Standard- and Integrated-Approach Groups

<table>
<thead>
<tr>
<th></th>
<th>Standard (N=49)</th>
<th>Integrated (N=57)</th>
<th>Signif. (P)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General pain experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvement</td>
<td>20 (41%)</td>
<td>43 (75%)</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>No improvement</td>
<td>29 (59%)</td>
<td>14 (25%)</td>
<td></td>
</tr>
<tr>
<td>Disturbance of daily activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvement</td>
<td>18 (37%)</td>
<td>39 (68%)</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>No improvement</td>
<td>31 (63%)</td>
<td>18 (32%)</td>
<td></td>
</tr>
<tr>
<td>Associated symptoms</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More</td>
<td>26 (53%)</td>
<td>4 (7%)</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Some</td>
<td>10 (20%)</td>
<td>10 (18%)</td>
<td></td>
</tr>
<tr>
<td>Fewer</td>
<td>13 (27%)</td>
<td>43 (75%)</td>
<td></td>
</tr>
<tr>
<td>McGill Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improvement</td>
<td>24 (47%)</td>
<td>22 (39%)</td>
<td>.38</td>
</tr>
<tr>
<td>No improvement</td>
<td>25 (51%)</td>
<td>35 (61%)</td>
<td></td>
</tr>
</tbody>
</table>

Premorbid State - Baseline Adjustment

- Family
- Work
- Marriage
- Finances
- Sex
- Sleep

Acute Pain (2 months)

- Realistically expects to get better
Subacute Pain (2-6 months)

- Denies chronic disability
- Subtle behavior changes
  - Social
  - Work
  - Sleep
- No depression – hope persists

Chronic Pain (>6 months)

- Doctor shopping
- Dependency
- Depression
- Hostility
- Lowered self-esteem

Subchronic Pain (Prolonged pain)

- Learned to live with it
- Doesn’t accept it
- Resolution of some findings
  - Drugs
  - Job
  - Sex
Irritable Bowel Syndrome

- Most common functional GI complaint - 30% of all patients
- Female: male = 2:1
- Altered motor reactivity to meals, stress, etc.
- Variations: chronic pain and constipation
  - Painless, intermittent diarrhea
  - Alternating constipation/diarrhea
- Complicated by hysterics, depressive, bipolar personality disorders
- RX: bulk agents, dietary fiber, sedation with tranquilizers/phenobarbitol

Irritable Bowel Syndrome and Chronic Pelvic Pain

- 48% of dx scope patients; 40% of hysterectomy patients
- 1 yr after scope, IBS patients less improved
- 1 yr after hyst, IBS less improved

Longstreh, Oct. 1990

Medical Treatment of IBS

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Therapy</th>
<th>Typical daily dosage</th>
<th>Side effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diarrhea</td>
<td>Loperamide</td>
<td>4 mg</td>
<td>Constipation</td>
</tr>
<tr>
<td></td>
<td>Diphenoxylate</td>
<td>20 mg</td>
<td>Euphoria, sedation</td>
</tr>
<tr>
<td></td>
<td>Hyoscyamine</td>
<td>&lt; 1.5 mg</td>
<td>Dry mouth</td>
</tr>
<tr>
<td></td>
<td>Dicyclomine</td>
<td>80-160 mg</td>
<td>Blurred vision</td>
</tr>
<tr>
<td></td>
<td>Desipramine</td>
<td>150 Mg</td>
<td>Dry mouth, confusion, hypertension</td>
</tr>
<tr>
<td>Constipation</td>
<td>Amitriptyline</td>
<td>25-50 mg</td>
<td>Dry mouth, confusion</td>
</tr>
<tr>
<td></td>
<td>Fiber (any source)</td>
<td>&gt;30 g</td>
<td>Bloating, abdominal pain</td>
</tr>
<tr>
<td></td>
<td>Lactulose</td>
<td>10-30 g</td>
<td>Bloating</td>
</tr>
<tr>
<td></td>
<td>Sorbitol</td>
<td>10-30 mg</td>
<td>Bloating</td>
</tr>
<tr>
<td>Abdominal pain</td>
<td>Cisapride</td>
<td>40-80 mg</td>
<td>Dizziness, headache</td>
</tr>
<tr>
<td></td>
<td>Desipramine</td>
<td>150 mg</td>
<td>Dry mouth, sedation, confusion, hypertension</td>
</tr>
<tr>
<td></td>
<td>Hyoscyamine sulfate</td>
<td>&lt;1.5 mg</td>
<td>Hypotension, constipation</td>
</tr>
</tbody>
</table>
G: What to ask

- “How often do you have a bowel movement?”
- “Are you troubled by constipation or diarrhea?”
- “Is your pain related to when you do or don’t have a bowel movement?”

Urethral Syndrome - Diagnosis

- Diagnosis of exclusion
  - No UTI, bladder pathology, detrusor instability
- Symptoms complex
  - Urgency, frequency, dysuria
- Urethroscopic findings
  - Erythema, exudate, inflammatory fronds and cysts

Urethral Syndrome: Etiologies

- Chronic urethritis
- Hypoestrogenism
- Urethral spasm
- Urethral stenosis
- Psychiatric disturbances
Urethral Syndrome
Clinical Clues: History

- Pelvic pain
- Dyspareunia
- Post-coital voiding problems

Urethral Syndrome
Clinical Clues: Physical Examination

- Urethral tenderness
- Bladder base tenderness
- Absence of uterine tenderness
- Absence of adnexal tenderness

Urethral Syndrome
Work-Up

- Urinalysis
- Cysto-urethroscopy
- Voiding studies
**Urethral Syndrome**

**Treatment**

- Chronic antibiotic suppression
  - Macrodantin 50 mg qhs x 3 months
- Urethral dilatations
  - x3 q 2 weeks

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**Interstitial Cystitis**

- Chronic, irritative voiding symptoms
  - Frequency, urgency, nocturia, pelvic/suprapelvic pain
- *Relief with voiding, worse with bladder filling, worse with certain food/drink*
- Dyspareunia common
- Incontinence unusual
- Dysuria, 1/3

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**Interstitial Cystitis**

- ? Collagen vascular
- ? Autoimmune
- ? Allergic
- ? Infectious
Interstitial Cystitis

- Anterior vaginal tenderness
- Sterile urine
- Cytology negative
- Cystoscopy under anesthesia
  - Reduced bladder capacity
  - Mucosal ulceration
  - Petechiae on redistention
- Potassium sensitivity test

Interstitial Cystitis - Treatment

- Hydodistention
- Dimethyl sulfoxide (DMSO) 50%
  - 50cc periodically
- Bladder retraining
- Biofeedback
- Antidepressant (e.g., Elavil, Tofranil)
- Antihistamines
- SSRIs
- Pentosan polysulfate (Elmiron)

U: What to ask

- “How often do you go to bathroom?”
- “Do you have a sense of urgency?”
- “Do you sometimes feel like you have to go, but there’s nothing that comes out?”
- “Do you get up in the middle of the night to go?”
Myofascial Syndromes

- Physical examination
- “Trigger points”
- Pressure reproduces pain

Abdominal Pelvic Pain

<table>
<thead>
<tr>
<th>Pain response</th>
<th>Patients (N)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No pain</td>
<td>64</td>
<td>52.5</td>
</tr>
<tr>
<td>Occasional pain</td>
<td>36</td>
<td>29.6</td>
</tr>
<tr>
<td>Present, but better</td>
<td>9</td>
<td>7.4</td>
</tr>
<tr>
<td>No change</td>
<td>13</td>
<td>10.7</td>
</tr>
<tr>
<td>Worse</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>122</td>
<td>100</td>
</tr>
</tbody>
</table>

Slocumb, 1984

Typical Pelvic Pain Posture

At least 3 of the following 5 characteristics must be present:

- Increased lumbar lordotic curvature
- High apex lumbar lordotic curve
- Anterior pelvic tilt
- Unilateral ilial torsion
- Unilateral standing posture
Musculoskeletal Screening Examination

Trigger Points in the lower abdominal quadrants
### Response to Physical Therapy Intervention

<table>
<thead>
<tr>
<th></th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete relief</td>
<td>15 (20%)</td>
<td>11 (19%)</td>
</tr>
<tr>
<td>Significant relief</td>
<td>39 (52%)</td>
<td>28 (49%)</td>
</tr>
<tr>
<td>Worse</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>No change</td>
<td>5 (7%)</td>
<td>9 (16%)</td>
</tr>
<tr>
<td>Lost to follow up</td>
<td>16 (21%)</td>
<td>9 (16%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>75 (100%)</td>
<td>57 (%)</td>
</tr>
</tbody>
</table>

### Musculoskeletal Screening Examination for Patients Presenting with Chronic Pelvic Pain - History

- Normal laparoscopy
- History of trauma to low back or lower extremities, including motor vehicle accident or fall
- Pain is altered by positional changes, particularly prolonged standing or sitting
- Lack or response to previous gynecologic intervention
- Exacerbation with stress

### Muscle Relaxants for Patients Presenting with Chronic Pelvic Pain

<table>
<thead>
<tr>
<th>Trade name</th>
<th>Generic name</th>
<th>Dosage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parafon Forte</td>
<td>Chlorzoxazone</td>
<td>500 mg q tid or qid</td>
</tr>
<tr>
<td>Robaxin</td>
<td>Methocarbamol</td>
<td>500 mg 3 tabs qid</td>
</tr>
<tr>
<td>Soma compound</td>
<td>Carisoprodol</td>
<td>200 mg 1-2 tabs qid</td>
</tr>
<tr>
<td></td>
<td>Aspirin</td>
<td>325 mg qid</td>
</tr>
<tr>
<td>Valium</td>
<td>Diazepam</td>
<td>2-10 mg qid</td>
</tr>
</tbody>
</table>
M: What to ask

- “When does it hurt?”
- “Does it hurt to have sex?”
- “Can you point to where the pain is?”

Response to Antidepressant Treatment for Patients with Chronic Pain and Depression by Onset Pattern

<table>
<thead>
<tr>
<th>Patient Onset Pattern</th>
<th>No Relief</th>
<th>Relief</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed pain then depression</td>
<td>11 (25%)</td>
<td>33 (75%)</td>
<td>44</td>
</tr>
<tr>
<td>Developed pain and depression simultaneously</td>
<td>6 (10%)</td>
<td>52 (90%)</td>
<td>58</td>
</tr>
<tr>
<td>Developed pain after depression</td>
<td>3 (21%)</td>
<td>11 (79%)</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>96</td>
<td>116</td>
</tr>
</tbody>
</table>

Response Following Administration of Three Major Antidepressants

<table>
<thead>
<tr>
<th>Antidepressant</th>
<th># of trials (in 116 pts)</th>
<th>Relief</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imipramine (Tofranil)</td>
<td>11 (25%)</td>
<td>33 (75%)</td>
<td>44</td>
</tr>
<tr>
<td>Amitriptyline (Elavil)</td>
<td>4 (16%)</td>
<td>21 (84%)</td>
<td>25</td>
</tr>
<tr>
<td>Desipramine (Norpamin)</td>
<td>10 (23%)</td>
<td>34 (77%)</td>
<td>44</td>
</tr>
<tr>
<td>Total</td>
<td>30 (22%)</td>
<td>105 (78%)</td>
<td>135</td>
</tr>
</tbody>
</table>
Somatization Disorder

- Chronic psychiatric condition
- Onset before 30
- Multiple somatic problems – no adequate explanation
- 14 of 37 symptoms

Management of Somatization Disorders

- See patient regularly
- Accept her need to be “ill”
- Do not make MD contact contingent on somatic complaints
- Do not vary contact time in proportion to symptom severity

Management of Somatization Disorders

- Allow patient to structure content of visit
- Minimize secondary gain
- Teach the patient to express emotions in words
- Control strong reaction to patient
- Watch for new pathology
Chronic Pelvic Pain and Sexual Abuse

- N=43
  - 22 with history of daily pelvic pain
  - 21 with no pain
- Sexual assault interviews
- Psychological self reports


Chronic Pelvic Pain and Sexual Abuse

- More dissociation
  - Alterations in memory, consciousness, identity
- More psychological distress
- Medically disabled
- Vocational and social dysfunction
- Physical symptoms amplified
- Childhood sexual abuse
  - 18/22; 9/21 control
  - Severe 12/22 CPP; 1/22 controls


P: What to ask

- “Have you ever been touched against your will either as a child or as an adult?”
“Compartmentalized” Pelvic Exam

- Perineum
- Pelvic floor
- Urethra / bladder
- Cervix
- Uterus / adnexa

“Doctor, I’ve had this pain in my ovary...right here.”

Physical Examination

“Is this the pain?”
Consider the Optometry model for pelvic pain.

Physical Examination:

Organ-specific tenderness
↓
Surgical procedure:
Specific pre-operative diagnosis

The Pelvic Witch Hunt
Be wary of claims for:

- Presacral neurectomy
- Uterine suspension
- LUNA
- Surgery for pelvic congestion
- Lysis of adhesions
- Hysterectomy
- Pain Mapping

Empiric GnRH Agonist for Pelvic Pain

- N=100
- Multi-centered trial
- Randomized, double-blind, placebo-controlled
- Diagnostic laparoscopy within 2 weeks of therapy
- Potential role for empiric GnRH prior to laparoscopy
Empiric GnRH

• Not for everyone
• Role of estrogen add-back
• Role of oral contraceptives/progestins
• Thorough work-up mandatory

Ovarian Vein Embolization for Pelvic Congestion Syndrome

• 9 of 11 “total or nearly total” relief (Johns Hopkins & Tripler)
• 18 or 23 “significant improvement of pain (Univ of British Columbia)
• Pooling of blood in ovarian vessels
• Stainless steel coils or liquid glue

Frequency of Hysterectomy for CPP Before and After Initiation of Clinic

<table>
<thead>
<tr>
<th></th>
<th>Before clinic</th>
<th>After clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration of interval</td>
<td>30</td>
<td>52</td>
</tr>
<tr>
<td>(months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quarterly gyn admissions</td>
<td>487 ±49</td>
<td>451 ±81</td>
</tr>
<tr>
<td>Total hysterectomies</td>
<td>657</td>
<td>810</td>
</tr>
<tr>
<td>Annual rate</td>
<td>262.8</td>
<td>187</td>
</tr>
<tr>
<td>No of CPP (%)</td>
<td>107 (16.3)</td>
<td>47 (5.8)</td>
</tr>
<tr>
<td>Annual rate</td>
<td>42.3</td>
<td>10.9</td>
</tr>
<tr>
<td>P&lt;0.0001</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In Patients with Negative Gyn Work-up, Consider:

- Gastroenterologic (IBS)
- Urogynecologic (IC, urethral syndrome)
- Musculoskeletal (trauma, trigger points)
- Psychiatric (sexual abuse, somatization, depression)