Chronic Pelvic Pain…..  
Relief for clinicians, and for patients

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Disclosures

- I have no financial disclosures
- I will discuss off-label use of drugs

New cinder cone or pu’u forming from Fissure 8

How do you feel when you see “pelvic pain” as the chief complaint for a patient you are about to see?

A. 0  
B. 1-3  
C. 4-6  
D. 7-9  
E. 10

The Challenge of CPP

- Frustrated (or desperate) patients want a definitive diagnosis and treatment right now
- Lack of clear national guidelines
- Lack of understanding of CPP among GYNs (and PCP’s)
- Lack of understanding among pain MDs of the pelvis
Overview of CPP

- Affects physical, sexual, and emotional well-being → Severely impacts quality of life
- Multiple systems interact and contribute to the pathophysiology of CPP
- In many cases a direct cause of CPP cannot be identified
- History of abuse, depression, and anxiety are common and exacerbate pain

Goals of this lecture

- Give you hope (and necessary skills) that you can help many women with CPP
- Interconnected, multi-factorial nature of CPP
- Stepwise algorithm
- Treatment focus: trigger points, pelvic floor dysfunction
- Trauma-Informed Pelvic Exam

Syllabus Note

- Syllabus includes slides that will not be addressed in lecture but are included for reference
- These slides are marked with "REF"

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

Ling, APS Conference 2010
### Differential Diagnosis!

<table>
<thead>
<tr>
<th>Gynecologic</th>
<th>Urinary tract</th>
<th>Mental Health Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endometriosis*</td>
<td>Interstitial cystitis*</td>
<td>Cause increased pain</td>
</tr>
<tr>
<td>Adenomyosis*</td>
<td>Neutrogena (IT)</td>
<td>Vaginitis</td>
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<tr>
<td>Anti-PF syndrome</td>
<td>Urinary diverticulism</td>
<td>Asymptomatic</td>
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<tr>
<td>Vulvodynia, pelvic vestibulitis</td>
<td>Chronic urethral syndrome</td>
<td>Physical and sexual abuse, PTSD</td>
</tr>
<tr>
<td>Pelvic adhesions (may be?)</td>
<td>Nephropathy</td>
<td>Depression, Anxiety</td>
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<tr>
<td>Pelvic congestion (maybe?)</td>
<td>Bladder cancer</td>
<td>Manic depression</td>
</tr>
<tr>
<td>Endometriosis</td>
<td>Endometrioid cyst</td>
<td>Anxiety</td>
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<tr>
<td>Endosalpingiosis</td>
<td>Irritable bowel syndrome*</td>
<td>PTSD</td>
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<tr>
<td>Nephropathy</td>
<td>Inflammatory bowel disease</td>
<td>Phobic anxiety</td>
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<tr>
<td>Pelvic pain and pelvic cyst</td>
<td>Diverticulosis</td>
<td>Depression</td>
</tr>
<tr>
<td>Endometrioid cyst</td>
<td>Cervical disease</td>
<td>Anxiety</td>
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</tbody>
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#### Most common

### Mental Health Issues

- Depression, anxiety, PTSD, IPV, h/o abuse: Exacerbate painful symptoms

### Primary etiology of pain can be Gyn, GI, GU or M-S

### It’s all connected

#### Gyn

- Depression, anxiety, PTSD, IPV, h/o abuse: Exacerbate painful symptoms

#### GI

- Physical and sexual abuse, PTSD

#### GU

- Post-PID syndrome

#### Musculoskeletal

- Urethral diverticulum

#### Neurologic

- Benign cystic mesothelioma

#### What CPP patients want

1. Personalized care
2. To feel understood and taken seriously
3. Explanation of the cause
4. Reassurance

Price BJOG. 2006

### Stepwise approach

1. Thorough, sensitive H&P
2. Set expectations
3. Address Mental Health
   - Treat depression if present
   - Counseling if h/o abuse
4. Eval and treat musculo-skel issues
5. Choose possible diagnosis and treat empirically
6. If not improved:
   - Consider another diagnosis/therapy
   - Add other meds (TCA, gabapentin)
   - Re-address M-S issues: physical therapy if not yet tried

### May do steps 3-5 in any order and at multiple visits
1. The CPP History

Not just for getting to diagnosis but also powerful therapeutic tool

- Careful history, close listening → build rapport, trust.
- Therapeutic benefit from the telling of one’s story (therefore, use written history forms only as adjunct)
- Reflect back what you have heard
- Discuss concerns & fears directly

1. CPP Physical Exam Goals

- Identify underlying pathology
- Reproduce pain
- Establish trust, minimize fear
- Not just a pelvic exam!
  - Observe gait/posture, thorough exam of abd wall, pelvic floor muscles, vaginal introitus

REFERENCE

CPP History

1. How are you?
2. How many pregnancies have you had?
3. Where does pain start/stop?
4. How much does it hurt?
5. When does it start?
6. Do you notice any pattern?
7. Does pain/presure affect your menstruation?
8. Is there any specific pattern in your cycles? Is the pain 24 hours?
9. Is your pain constant or intermittent? If intermittent, how long in each episode?
10. When and how did your pain start and how has it progressed?

Particularly Important Questions to Ask of Women With Chronic Pelvic Pain

- Did you ever have an exploratory surgery?
- What makes your pain better?
- What makes your pain worse?
- Did you have a surgical procedure that was done for pain relief?
- What symptoms did you have at that time?
- How did you find out about this procedure?
- Did you ever receive the results of any tests?
- Are you pregnant or menstruating?
- What is the relationship between your periods and your pain?
- How many cycles have you had?
- Any specific time frame?
- What is your general health history?
- Any medications or therapies you have tried?
- What do you believe or fear is the cause of your pain?
Trauma-informed Care

- At least 25% of women report abuse history and 5-10% have PTSD. Many don’t divulge, even when asked.
- We can unwittingly re-traumatize patients with our exams or questions.
- Trauma-informed care means treating every patient as if she has been physically or sexually abused, or traumatized in the past.

Reactions are most often triggered by pelvic exams, breast exams, colonoscopy, anoscopy and oral exams.

- Other factors: power differential between provider and patient, having to undress.
- Focus on creating a safe environment.

### Trauma-informed Pelvic Exam

- Give her as much control as possible (ask permission frequently).
- Meet patients while they are still clothed, preferably seated in chair, not exam table.
- Offer a chaperone/support person.
- Be prepared to stop, defer exam to another time.

### Provider between legs and standing

- Getting into position: you stand or sit to side rather than between legs.
- If needs help, ask permission to aid in placing feet in foot rests (Not “stirrups”).
- Don’t place hand at bottom of table and have her move down until she touches your hand—use your words instead.

- Never push legs open.
- Go slowly. Stop immediately if signs of unease. Re-ask permission before re-starting.
- Be careful of language: “table”, not “bed”, “place speculum”, not “insert.”
2. Set clear expectations
   After asking for her goals/concerns, set realistic expectations:
   1. Can’t guarantee pain-free
   2. Can’t guarantee will find a cause (but will try)
   3. Do guarantee to partner with her to help her improve pain and/or function
   4. Relief requires time. Multiple visits. Multiple treatment modalities
   5. Relief requires work (PT, exercises etc)
   6. Visits should be scheduled, not during flares
   7. Don’t be pushed into an immediate diagnosis
   8. Pain contract for opiates (if necessary)

3. Address mental health issues
   - Pain has impact on quality of life and functional capacity
     - Women become isolated
     - Relationships become strained
     - Pre-existing psych issues such as anxiety, depression, IPV, PTSD exacerbated by pain and vice versa

Puako Petroglyph Park
- Puako: 2 miles down highway toward Kona
- Turn left at T in Puako
- End of road for petroglyphs
- Along the way, many beach access sites and tidal pools

3. “Sensitive History”
   - IPV, h/o abuse, sexual functioning, depression
   - Frame it: remember, these pts may distrust medical system, think you are trying to say their pain is in their heads
     - “I would like to ask you questions about the rest of your life to help me understand how the pain is affecting you. This will help me know how best to treat you.”
     - “I ask these questions of all my patients”
Assess quality of life (REF)

1. In the past month, how much has your pelvic pain kept you from doing your usual activities such as self-care, work or recreation? (scale 1-5)
2. How much has your pelvic pain interfered with your quality of life?
3. How much have the treatments you have received for your pelvic pain improved your quality of life?
4. How do you cope with your pain?
5. How does your partner, family etc. respond when you are in pain?

Assess emotional Health (REF)

Screen for physical or sexual violence, including in childhood

1. "At any time, has a partner hit, kicked, or otherwise hurt or threatened you?"
2. "Has your partner or a former partner ever hit or hurt you? Has he or she ever threatened to hurt you?"
3. "Do you ever feel afraid of your partner?"
4. Have you ever been forced to have sex when you didn’t want to?

Depression (12-35%)

1. During the past month, have you been bothered by little interest or pleasure in doing things?
2. During the past month, have you been bothered by feeling down or hopeless?

3. Treat mental health issues
   • SSRI/SNRI for depression
   • Counseling (especially cognitive-behavioral therapy) for h/o abuse, difficulty coping with pain
   • Address sexual pain

4. Evaluate and treat musculoskeletal issues
Myofascial Pelvic Pain Syndrome/
Pelvic Floor Myalgia

- The majority of women with CPP have pelvic floor myalgia
- Inciting event: injury/trauma, visceral condition (IBS, EM, EC), referred pain from viscera, poor posture
- Leads to: Short, tight, tender pelvic floor muscles and pain in pelvis, vagina, vulva, rectum, or bladder, or referred to thighs, buttocks, or lower abdomen.

Pelvic Floor Myalgia

Findings

- Pain is aching, throbbing, or heaviness
- Low back, sacral pain; can radiate to hip, thigh
- Often worse with prolonged standing
- Levators are tense, tender on vaginal exam

The Exam: Carnett’s Sign

- Differentiates pain originating from the abdominal wall versus peritoneal cavity
- Patient does partial sit-up or straight leg raise 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.

12-point Unimanual Unidigit Vaginal Exam

- Palpate in 4 quadrants x 3 depths
- Single finger, NO abdominal palpation
  1. Just beyond hymen
     - 12:00 urethra, 6:00 rectum
     - 3:00/9:00 obturator internus
  2. Mid-vagina
     - 12:00 bladder base, 6:00 rectum
     - 3:00/9:00 puborectalis
  3. Just before cervix
     - 12:00 bladder, 6:00 rectum/cul-de-sac
     - 3:00/9:00 pubo/iliococcygeus

“Does this reproduce your pain?”
A patient
21 yo with CPP x 1.5 yr, band across her lower abd, thinks it started with IUD placement. IUD removed 3 mos ago, no change. Of note, had leg injury and walks with cane.
When asked to point to pain with one finger, she could!

She had….

Myofascial Trigger Point
- Hyperirritable palpable nodules that are taut bands of involuntarily contracted muscle fibers (Tough et al., 2007)
- When palpated the pain usually radiates to another location
- Can be in abdominal wall, perineum or pelvic floor
- Abdominal wall and vagina share T10-12 dermatomes with pelvic organs: Pain from trigger points referred to pelvic organs


Example: trigger point obturator internus
- Pain referred to urethra causing burning and urgency
- Work-up for UTI negative, told she is fine
- Symptoms persist. Told she has interstitial cystitis

Trigger Point Injection Therapy
- Local anesthetic injection(s) directly into trigger point (TP).
- Thought to interrupt pain pathway
- 93% success by 5th injection in abdomen (Kuan, 2006)
- Best if combined with physical therapy
**Trigger Point Injection Therapy**

- **Agent:** Lidocaine 1%, Bupivacaine 0.25%, Plus /minus triamcinolone 10mg (caution corticosteroids)
- **Volume:** 2 to 10 cc. (use 2 cc if multiple trigger points, larger volume if only one. Beware lido toxicity—limit to <15-20 cc)
- 22 or 25 gauge needle, long enough to reach the TP. (can use prilocaine/lido 2.5/2.5% cream on skin prior to injection)
- Find the TP with the needle: TP= maximal burning pain
- Weekly injections, stop if no relief at all. Continue if any relief.

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**Intravaginal trigger points can be accessed with trumpet pudendal needle guide**

**Another patient...**

25 yo with CPP and known endometriosis (l/s proven), much improved with continuous OCP but still w significant dyspareunia and pain that affects her QOL. On 12 point vaginal exam, she was diffusely tender.

**Treatment of myofascial pain**

- Anti-inflammatories, ice to vagina, vulva
- Neuropathic pain medications (gabapentin, TCAs)
- Pelvic floor physical therapy
  - Myofascial release
  - Biofeedback
- Home exercise program
  - Abdominal breathing, rescue poses, stretching exercises

**Therapeutic Exercises for Women with Chronic Pelvic Pain**

[Link](https://www.youtube.com/watch?v=ntCgZ-U)
Fill condom with water and freeze, cover with towel and place in panties (externally)

For a softer and less cold ice pack, add alcohol to the water, freeze jello or use rice or flax seeds

Because less cold and softer, this can (apparently) be used within vagina.

Caution: freezer burn and/or condom breaks!

5. Choose possible diagnosis & treat empirically

These 5 diagnoses account for most identifiable causes of CPP:
1. IBS
2. Interstitial Cystitis
3. Endometriosis
4. Adenomyosis
5. Vulvar pain syndrome (vulvodynia)

Most endometriosis initially includes dysmenorrhea (may progress to continuous, non-cyclic pain)

Quality of pain
- Squeezing, cramps = visceral
- Sharp, shooting, lancinating = somatic

Cyclic pain is usually gynecologic but both IBS and interstitial cystitis can be worsened with menses
CPP: Empiric diagnosis

- Urinary symptoms → Interstitial cystitis
  - Dysuria, frequency, nocturia, incomplete voiding
  - Pain worse with full bladder?

- GI symptoms → IBS or endometriosis
  - Dyschezia, nausea, diarrhea, constipation, mucus stools, hematochezia, melena
  - Pain relieved by bowel movements?

- Musculoskeletal symptoms → myofascial
  - LBP, joint pain, sciatica, h/o injury
  - Pain affected by movement, rest

Irritable Bowel Syndrome (IBS)

- Pain or discomfort for 3 days/month in the prior 3 months with 2 or more of:
  - Improvement with defecation
  - Onset associated with a change in frequency of stool
  - Onset associated with a change in appearance of stool

- Symptoms lending support to diagnosis
  - >3 bm per day or <3 bm per week
  - Lumpy/hard or loose/watery stool, mucus passage
  - Urgency or incomplete emptying
  - Bloating or distension

- Symptoms may be precipitated by meals or certain foods

Caveats:
- Can be worse with menses so don’t rule out if pain is cyclic

Treatment for IBS (REF)

- Dietary recommendations:
  - Elimination diet
  - Fiber—Mainstay of treatment
    - Eat at regular times, watch dairy products
    - Drink plenty of fluids
  - Pain/gas/bloating: antispasmodic (dicyclomine, hyoscyamine)
  - Constipation: increased fiber and psyllium
  - Diarrhea: loperamide
  - Stress reduction
  - Exercise regularly
  - Antidepressants
  - Alosetron (diarrhea) or lubiprostone (constipation)
  - CAM: acupuncture, herbs, probiotics, hypnosis, peppermint

Interstitial Cystitis (IC)

- Symptoms/Signs
  - Urgency, frequency, nocturia, bladder pain
  - Pain with full bladder, better with voiding
  - May also have dyspareunia, urge incontinence
  - Bladder tenderness, pelvic floor tenderness
  - Absence of objective evidence of another disease that could cause the symptoms

- Diagnosis of IC: PUF Questionnaire (Pain Urgency Frequency)
  - Max score = 35
  - PPV 91% (vs. KCL sensitivity) if score > 20
  - Lowest threshold for diagnosis is score ≥12
Endometriosis (EM): Presentation

- Classical EM occurs in a minority of patients
- Dysmenorrhea
- Dyspareunia
- Perimenstrual sx eg: tenesmus, diarrhea, dysuria, hematuria, sacral backache
- Commonly, continuous CPP is the sole complaint (although many will give h/o of significant dysmenorrhea)
- Bimanual exam may show:
  - Uterosacral ligament nodularity,
  - Fixed uterine retroflexion, immobile uterus
  - Uterine and adnexal tenderness
  - Tender pelvic floor

Endometriosis- empiric therapy

1. NSAID + Continuous OC x 2-3 mo

   - Improved?
     - Yes
     - No

   - Continue OC
     - Pain Improved?
       - Yes
       - No

   - Complete x 6-9 mo
     - Yes
     - No

   Consider L/S, other diagnoses, muscle relaxants
**Adenomyosis Presentation**

- **Classic Triad:** AUB, dysmenorrhea, boggy/tender uterus on exam
- **Symptoms**
  - Onset usually in late 30s-40s (later than endo)
  - New onset dysmenorrhea; constant CPP possible
  - Sometimes: dyspareunia
  - Irregular vaginal bleeding
  - No bowel or bladder symptoms unless EM'osis
- **Signs**
  - Uterus enlarged, “boggy” and tender
  - No adnexal tenderness

**Adenomyosis** = Endometrial glands and stroma within myometrium

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**Adenomyosis: Diagnosis/Treatment**

- **Diagnosis**
  - Pathologic diagnosis.
  - More recently, MRI and Ultrasound being used. However, unclear clinical utility, can simply start empiric therapy.
- **Treatment** (same as endo but often not effective):
  - Levonorgestrel IUD (small RCT shows better than OCP)
  - Ovarian suppression: OCs, Patch, DMPA, nexplanon
  - If fail→ hysterectomy
  - Medical management often ineffective for controlling pain of adenomyosis. (works for bleeding)
  - Unlike for other pelvic pain syndromes, hysterectomy for adenomyosis is often curative b/c symptoms confined to uterus

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**Vulvar Pain Syndrome**

- **Localized (provoked)= Vestibulodynia**
- **Diagnosis via allodynia with Q-tip test**
- **Generalized = Vulvodynia**
- **Symptoms**
  - Vulvar discomfort, burning, stabbing, stinging
  - Pain with intercourse, tampon use
  - Often multiple prior vaginitis treatments
  - Often co-exists with pelvic floor myalgia

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**Vulvar Vestibule**

- Gently touch with a q-tip
- Start at the thigh and work down to perineum bilaterally
- Proceed from labia majora to labia minora finally to the vestibule

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**Behavioral:** Avoidance of vulvar irritants, constipation, liberal use of lubrication/veggie oil, cool pack for burning, esp after sex

**Meds:** No meds clearly superior, may need to try several (very little evidence, large placebo effect)
- Start with topical lidocaine or topical gabapentin 6%, 3 mos trial
- Lidocaine pre-intercourse
- Others: Oral TCA’s, Anticonvulsants, SSNRI’s, Opioids, Topical estradiol cream (if atrophic), compounded antidepressants, anticonvulsants

See Bonhan: Vulvar Vestibulodynia, ObGyn Survey, 2015

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**Non-medical treatments**
- Check for and treat pelvic floor muscle myalgia which often co-exists
- CBT, biofeedback and vestibulectomy all effective in RCT.
- **Surgery?** For generalized vulvodynia, surgery contraindicated. For localized vestibulitis, vestibulectomy has been shown most effective in RCT’s (68% decrease pain)

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**6. If no improvement**
- Consider another diagnosis/trtment
- Add other meds (TCA, gabapentin)
- Re-address M-S issues: physical therapy if not yet tried
- Re-address mental health
- Repeat full H&P

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**Treatment of Neuropathic Pain**
- Mainly helpful in women with daily pain
- Clinical depression is present?
  - SSRI (e.g., fluoxetine) or SNRI (e.g., venlafaxine)
  - Advance to “primary care” dosing limits
- Clinical depression not prominent
  - Gabapentin 100-300 mg QHS, adv to 900 mg TID
  - TCA: nortriptyline 10 mg QHS, adv weekly to 50 mg
- Sleep problems
  - Herbals, antihistamines
  - Short acting sleeping meds: e.g., zolpidem
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 tonics
- Alternative providers: TCM, craniosacral, chiropractic, energy medicine, strain/counter strain, etc.

Stepwise Approach to CPP

1. Thorough, sensitive H&P
2. Set expectations
3. Address Mental Health
4. Eval and treat musculo-skel issues
5. Choose possible diagnosis and treat empirically
6. If not improved, repeat steps 3,4,5

Take It Home

- Spend time to establish trust
- Set realistic goals with your patient: improved function vs. complete remission
- Think beyond “making a diagnosis”
- Treat depression, PTSD, that can make the perception of pain much worse
- Trauma-informed pelvic exam

Take It Home

- Pelvic floor myalgia is common and perpetuates the pain cycle
- Use 12 point vaginal exam to diagnose
- Treat with pelvic PT +/- trigger point injections
- If your first empiric therapy is ineffective, don’t give up.
  - Re-visit other diagnoses, depression and musculo-skeletal issues.
- Build a community: physical therapist, pain consultant

Remember what CPP patients want

1. Personalized care
2. To feel understood and taken seriously
3. Explanation of the cause
4. Reassurance

"Patients don’t really come to us because they are in pain, they come to us because they are suffering."
Now how do you feel about seeing a patient with pelvic pain?

A. 0
B. 1-3
C. 4-6
D. 7-9
E. 10

Resources: YouTube Videos

- Therapeutic Exercises for Women with Chronic Pelvic Pain; https://www.youtube.com/watch?v=mpY6bE92Z-4 (1.5 hr)
- Spanish: Ejercicios Terapéuticos para Mujeres con Dolor Cronico Pelvico https://www.youtube.com/watch?v=nktu7NBgZ-U (1.5 hr)
- MFR Self-Treatment for the Pelvic Floor à la the John F. Barnes Myofascial Release Approach https://www.youtube.com/watch?v=GjWjzisNH4E (single exercise, 2.5 min)
- Pelvic Floor Relaxation Exercises for Pelvic Pain https://www.youtube.com/watch?v=8tM3K_A4sGQ (3 techniques, 5.5 min)

Recommended References

- Vulvodynia review: Bonham, ObGyn Survey, 2015