Multimodal Management of Chronic Pelvic Pain

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Disclosures

I have no disclosures

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Objectives

- Define chronic pelvic pain and describe the role of chronic overlapping pain conditions
- Outline a history and exam framework to identify relevant pain generators
- Review evidence-based and multimodal treatments for chronic pelvic pain

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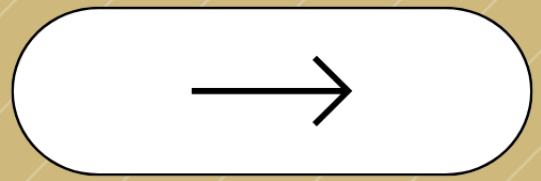
What is chronic pelvic pain?



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Case – 17 yo G0

- Presents to pediatrician with dysmenorrhea since menarche at age 13
  - Negative pregnancy test
  - STI screening negative
  - Pelvic ultrasound normal
- She is recommended to start OCPs

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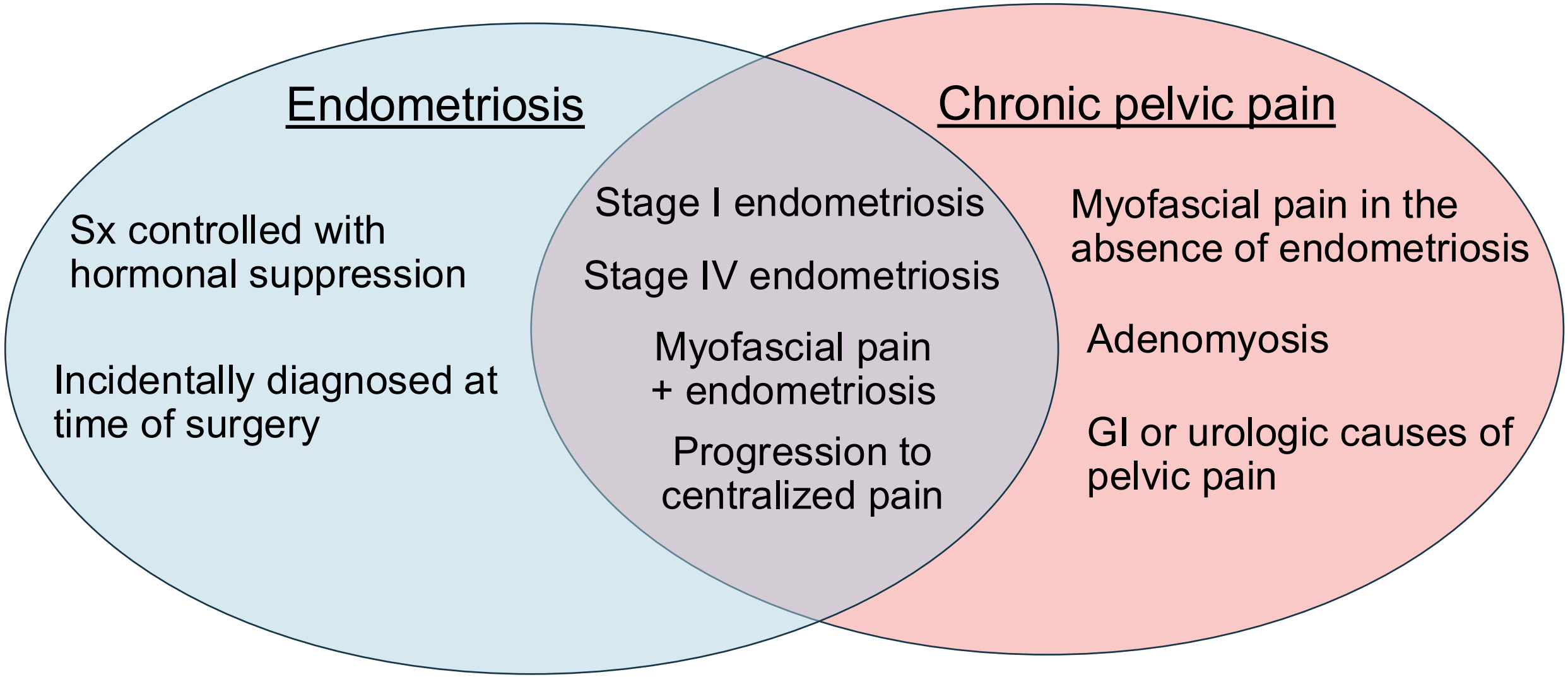
Definitions

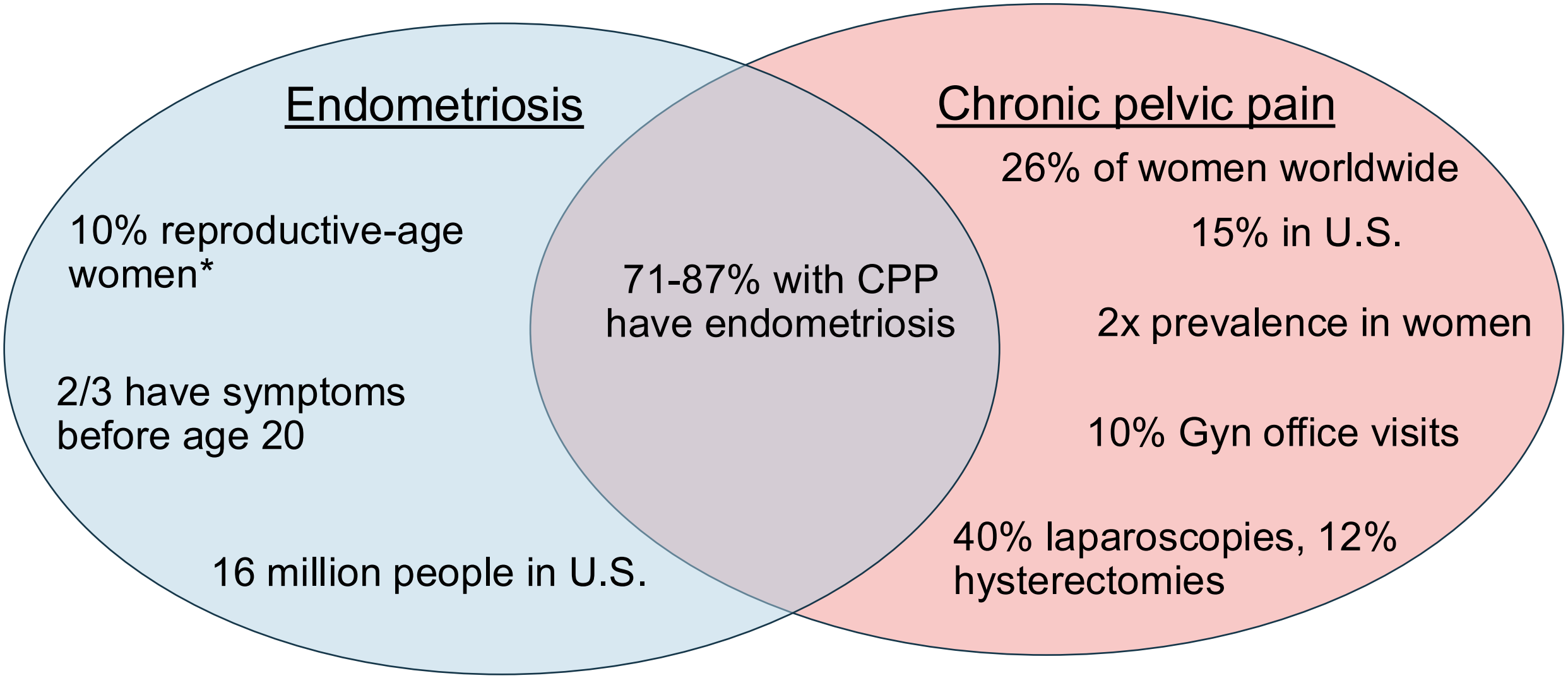
- **Chronic pelvic pain**: pain arising from pelvic structures, lasting >6 months

- **Endometriosis**: chronic inflammatory disease involving endometrium-like tissue outside the uterus

Two Distinct Entities

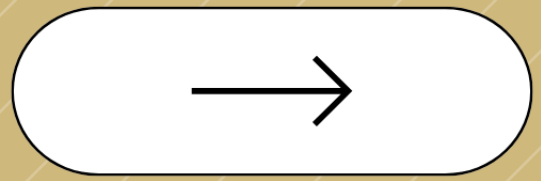


Epidemiology



*Term “women” used to represent people assigned female at birth

How does chronic pelvic pain present?



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Case – 25 yo

- Presents to PCP with 1 year of lower abdominal pain most days of the month despite OCPs, worse with sex
- Repeat US negative
- She is referred to Gynecology and undergoes diagnostic laparoscopy that identifies endometriosis, IUD placed

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Diagnostic Delays in Endometriosis

- 7-12 years diagnostic delay

*Our patient: 12 years since symptom onset

- Average age at diagnosis 28 years
- Visit primary care provider 7 times before specialty referral
- No standardized screening or assessment tools

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Case – 33 yo G1P1

- Presents to PCP three years after delivery of her son reporting worsening constipation, difficulty emptying her bladder
- She is referred to Urology and GI. Extensive work-up negative, starts bowel regimen.

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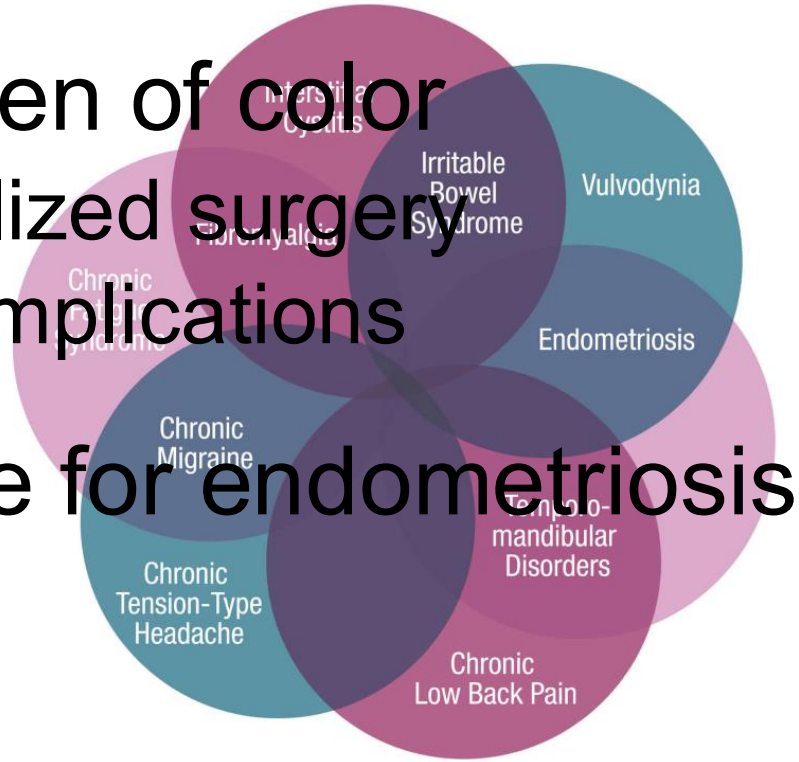
Complexities and Challenges

- Most develop other pain conditions:
  - IBS, painful bladder, pelvic floor dysfunction, vulvodynia
  - Progression of untreated pain, nervous system remodeling
- Poorer outcomes for women of color
  - Reduced access to specialized surgery
  - Higher rates of surgical complications
- Need for subspecialty care for endometriosis and chronic pelvic pain



Mechanisms of Chronic Pelvic Pain

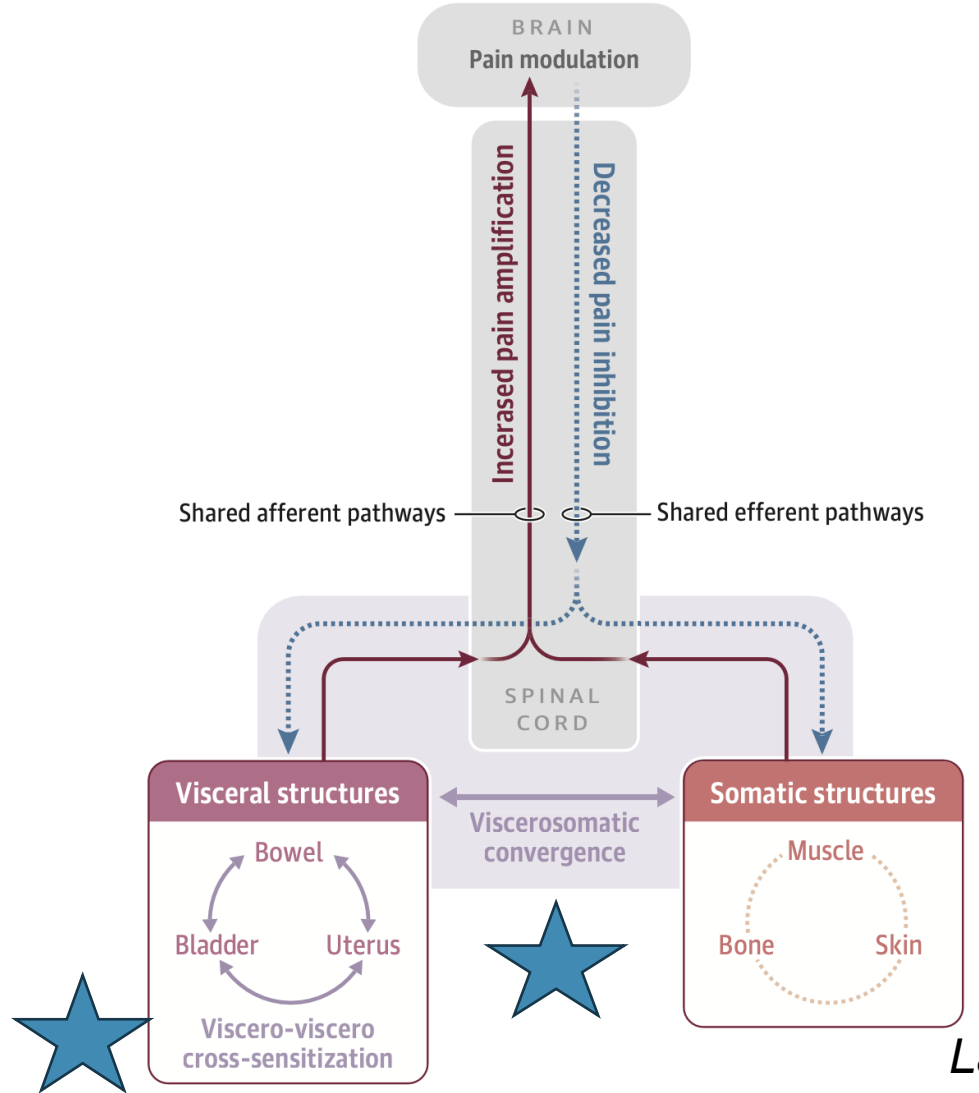
Nociceptive pain:

Non-neural tissue damage

Visceral

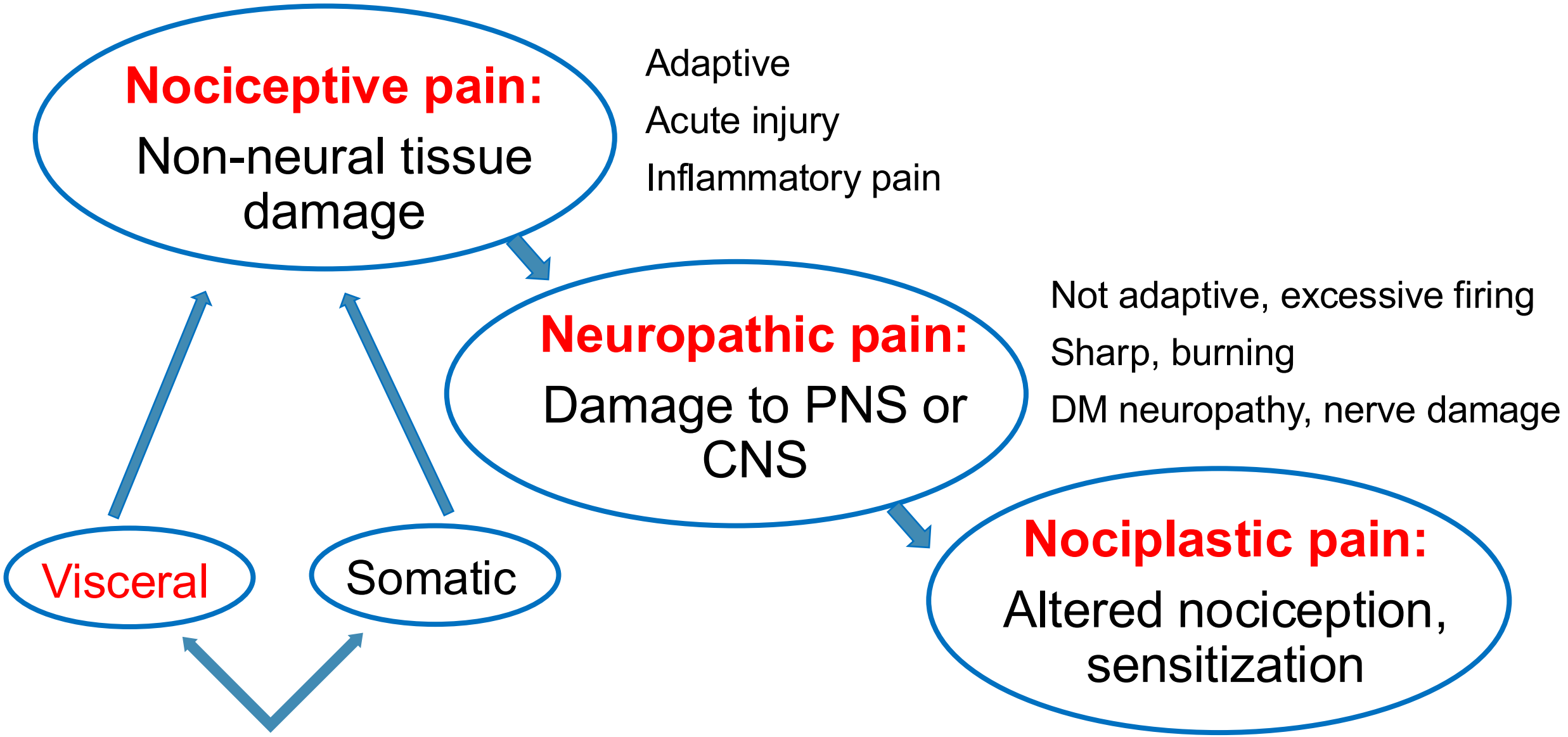
Somatic

Figure 1. Viscero-Viscero Cross-Sensitization and Viscerosomatic Convergence Pathways



Lamvu, et al. 2021

Mechanisms of Chronic Pelvic Pain



Central Sensitization / Nociplastic Pain

- Drop in pain threshold, increased responsiveness
- Inferred based on phenomena of hyperalgesia and/or allodynia
- Features: multifocal, widespread
- Severity out of proportion to pathology
- Persists when original signal has ceased

Panel 2: **Clues in patient's history suggestive of nociplastic pain syndrome**

- Childhood and adolescent symptoms of pain (eg, headache, abdomen, or low back)
- General symptoms (eg, fatigue and cognitive problems)
- Hypersensitivity to environmental stimuli (eg, light or sound)
- Psychological symptoms (eg, anxiety or depression)
- Symptoms causing a high amount of emotional strain
- A family history of chronic pain and mental health problems
- High use of health-care services (eg, many doctor visits or investigations)
- Poor or no response to conventional analgesics (including opioids)

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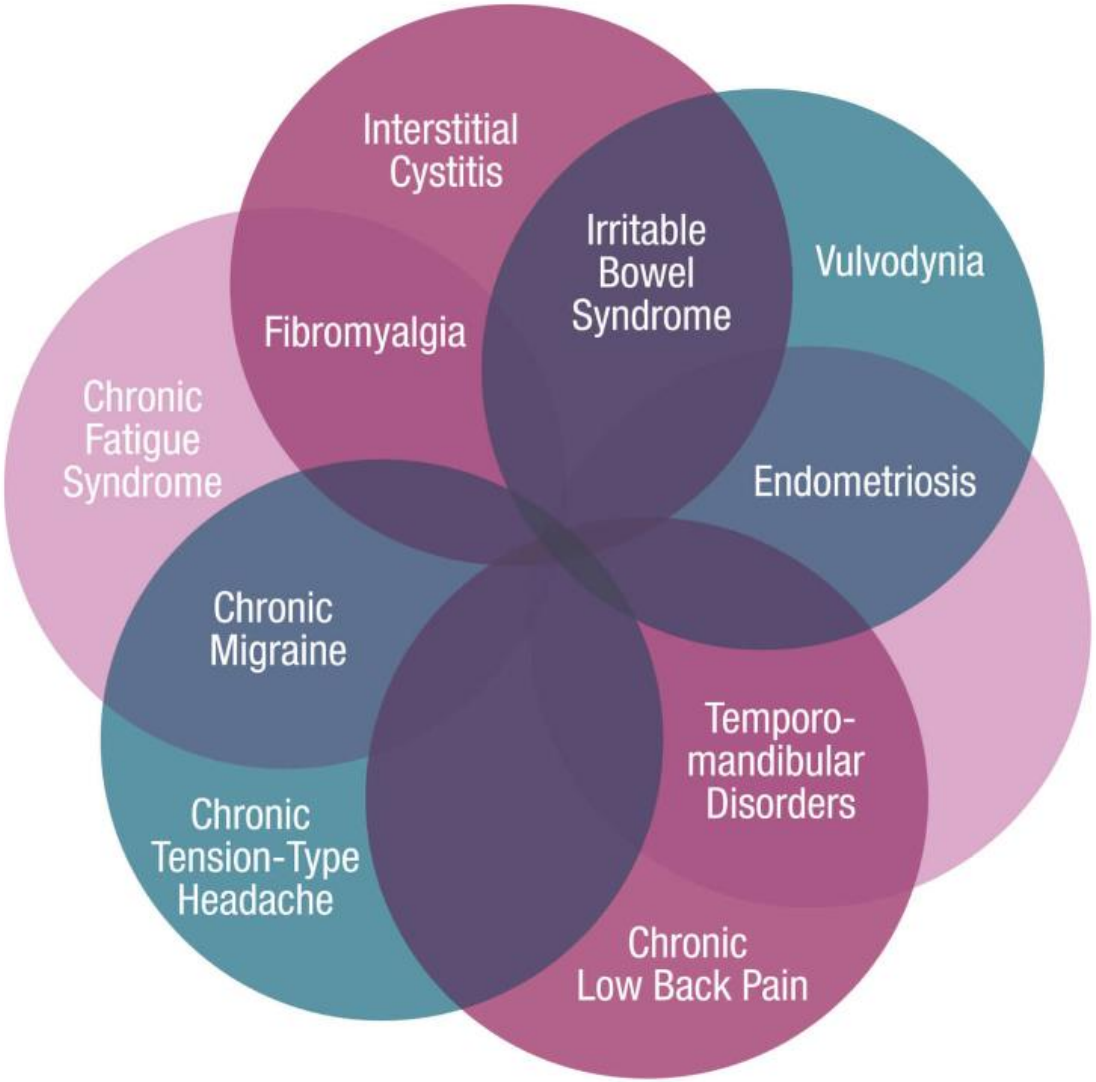
Chronic Overlapping Pain Conditions



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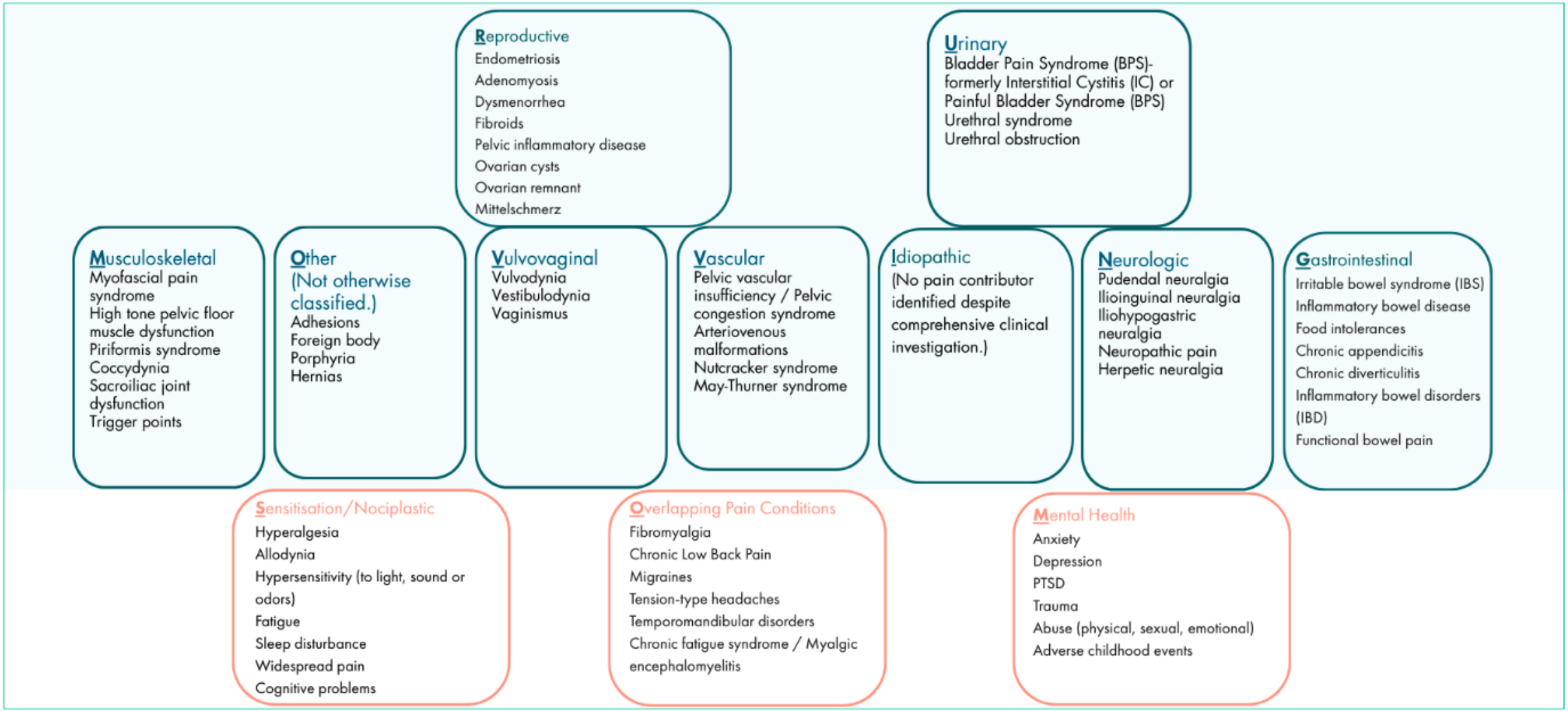
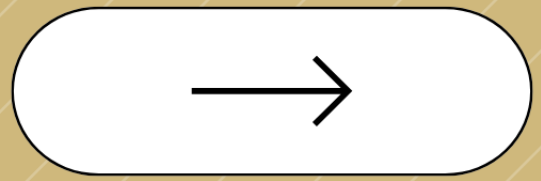
New FIGO Classification

Figure 3: FIGO-IPPS categorisation for conditions associated with female chronic pelvic pain that spell out the acronym **R U MOVVING SOMe**.*



Understanding What is Really Going on



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Case – 36 yo → 45 yo

- Presents to gynecologist with constant pelvic pain, desires “definitive” treatment
- Undergoes minimally invasive hysterectomy, bilateral salpingectomy, hormonal treatments stopped
- Her pain persists, diagnosed with depression, develops relationship and employment concerns

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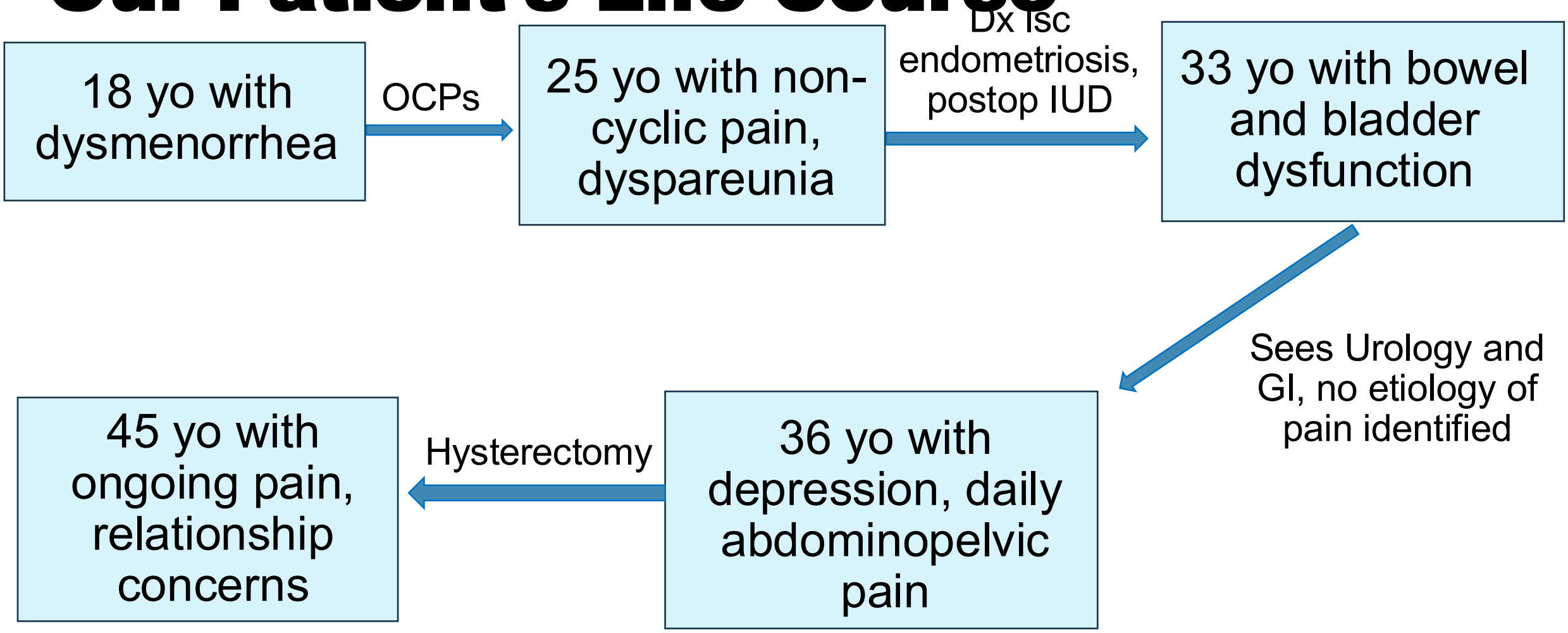
Our Patient's Life Course



What have we missed? How can we interrupt this progression?

Differential: Organ Systems

Gynecologic	GI	Urologic	MSK	Nervous
• Endometriosis • Adenomyosis	• Irritable bowel syndrome	• Interstitial cystitis / painful bladder syndrome	• Pelvic floor dysfunction • Abdominal myofascial pain • Trigger points	• Central sensitization • Peripheral nerve injury (pudendal neuralgia)
• Fibroids • Pelvic venous disorders • Pelvic masses • Pelvic infections • Primary dysmenorrhea • Pelvic adhesions	• Chronic constipation • Diverticulitis • Hernia • Crohn's / UC • Carcinoma	• Recurrent UTI • Nephrolithiasis • Diverticulum / anatomic changes	• Low back pain • SI joint dysfunction • Disc disease	• Mood disorders • Trauma • Other pelvic neuralgias

History

Goals of first visit:

- **Understand patient's story**
- **Characterize pain**
- Identify potential involvement of multiple systems, make your differential
- Identify symptoms/signs that point to nociplastic pain
- Educate patient about the complexity of CPP
- Help patient set expectations, time course, prioritize symptoms to address first

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History

Evaluation of patient with chronic pelvic pain

1 History assessment

Pain history
- Onset and location
- Frequency (cyclic or noncyclic)
- Distribution and radiation
- Chronology
- Exacerbations
- Alleviators
- Gastrointestinal and urinary symptoms

Pain burden
- Physical
- Work
- Social activities
- Sexual function
- Social support
- Coping
- Cognitive

Pain comorbidities
- Fibromyalgia
- Migraine
- Chronic low back pain
- Neuralgias
- Chronic fatigue

Pelvic pain comorbidities
- Interstitial cystitis
- Bladder pain syndrome
- Irritable bowel syndrome
- Vulvodynia
- Endometriosis

General history
- Surgical
- Medical
- Gynecologic/obstetric
- Sexual
- Sexually transmitted infection (STI)
- Medications
- Prior pain treatment

Nonpain comorbidities and contributing factors
- Sleep
- Mood
- Psychiatric comorbidities (depression, anxiety, PTSD, MST, ACE, trauma)

Red flag symptoms that may indicate a potentially serious cause for acute pelvic pain, not related to chronic pelvic pain
- Irregular bleeding and aged >40 y
- New bowel mass and aged >50 y
- Foul vaginal discharge
- Postcoital bleeding
- Rectal bleeding
- Pelvic mass
- Change in pain severity or character

Lamvu, et al. 2021

Impact of Trauma

- Highly prevalent and relevant to your care
  - Those with CPP more often h/o childhood emotional (OR 3.2), sexual (OR 4.0) and physical abuse (OR 4.2)
  - Generalized abdominopelvic pain associated with trauma history
  - Trauma influences beliefs about pain (catastrophizing)
  - Physical exams and even history taking can be sources of trauma

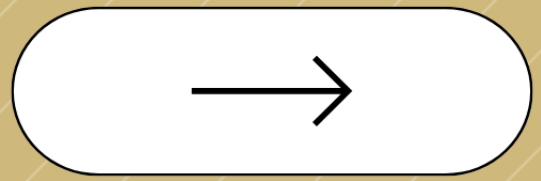
- Need to practice trauma-informed care with all patients!

Physical Exam

Physical examination following initial assessment				
SITTING **Examination of back**	SUPINE **Abdominal examination** Including abdominal wall	LITHOTOMY **Single digit examination** Vagina and pelvic floor	**Bimanual examination** Uterus, adnexa, cul-de-sac, and rectovaginal septum	**Speculum examination**
Findings that suggest endometriosis				
	Tender umbilical nodule Tender abdominal wall nodule, commonly occurs near surgical scar from cesarean delivery (abdominal wall endometriosis)	Nodularity or tenderness of posterior cul-de-sac (deep endometriosis in uterosacral ligament, rectovaginal septum, and/or rectosigmoid colon)	Nodularity and/or tenderness in posterior cul-de-sac (deep endometriosis) Decreased uterine mobility with tenderness (deep endometriosis) Ovarian mass (endometrioma)	Tender blue-gray nodule in posterior vaginal fornix with vaginal speculum examination (vaginal endometriosis)
Findings that suggest overlapping pain conditions or other gynecologic pathology				
Tenderness in the paraspinal, coccyx, or sacroiliac joints (possibly musculoskeletal or rheumatologic)	Neuropathic pain around surgical scars Abdominal wall trigger points (myofascial pain)	Vulvar tenderness to cotton swab (vestibulodynia) Tenderness in the pelvic floor (pelvic floor myalgia) Bladder tenderness (bladder pain syndrome and/or interstitial cystitis)	Enlarged uterus (uterine fibroids, adenomyosis) Ovarian mass (nonendometrioma)	Vaginal atrophy, lichen planus (dyspareunia)
A normal pelvic examination and absence of risk factors does not exclude a diagnosis of endometriosis				

As-Sanie, et al. 2025

Evidence-based Treatments



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Identify Pain Sources

Gynecologic	GI	Urologic	MSK	Nervous
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Breakthrough bleeding	Dyschezia Stool changes	Dysuria Frequency Urgency Bladder spasms	Vaginal or pelvic pain Pain on muscle palpation	Widespread pain Burning Topical/vulvar pain

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Hormonal suppression

- Postoperative suppression associated with reduced pain and endometriosis recurrence rates

- **First line**
  - Combined hormonal contraception (20-30 mcg estradiol)
    - Continuous > cyclic
  - Progestin-only (norethindrone acetate)

- **Second line**
  - GnRH agonist or antagonists
  - Add-back hormone therapy

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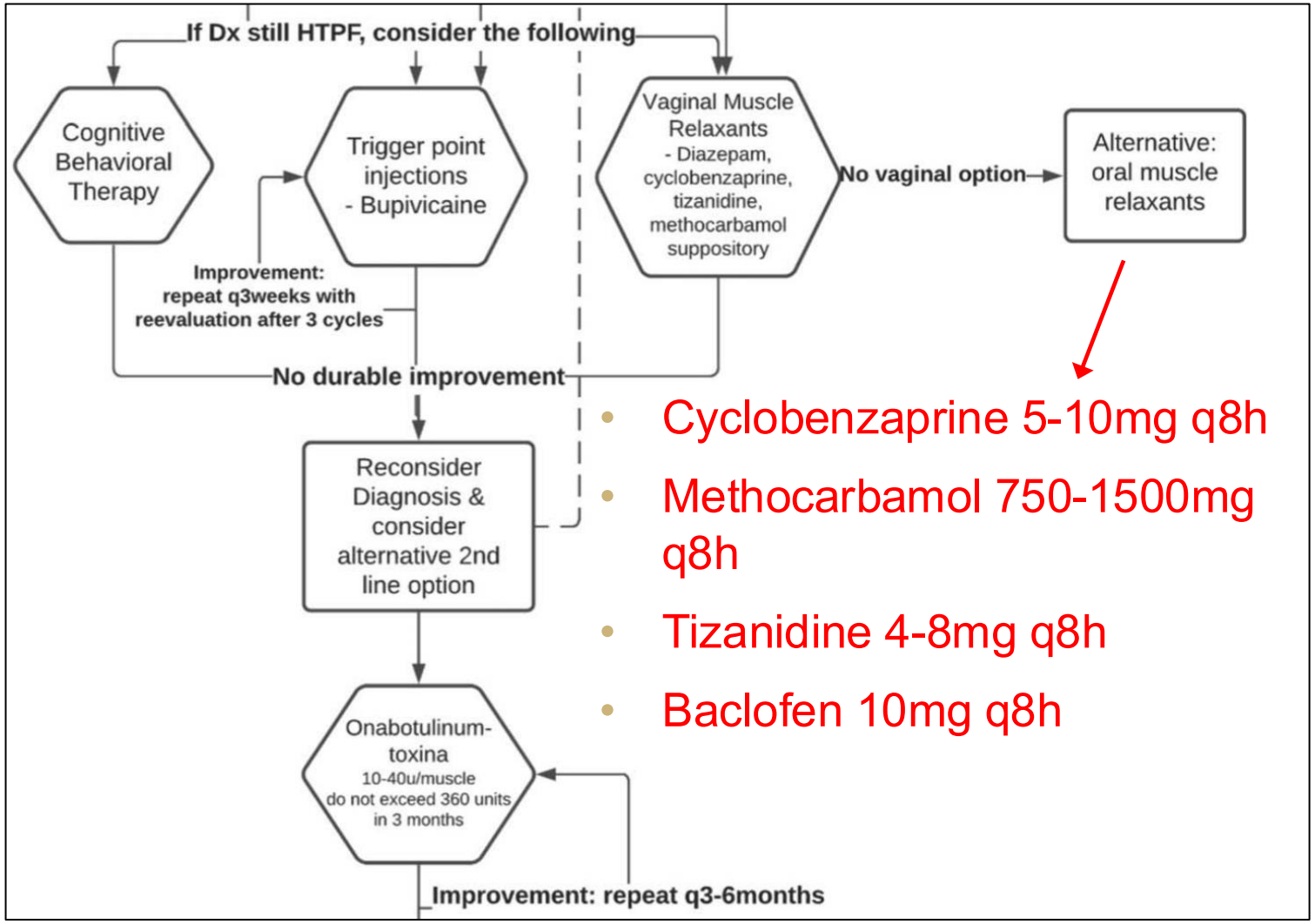
High Tone Pelvic Floor Dysfunction

- **Pelvic floor physical therapy**
  - Poor attendance (15-40%)
  - Effective in 2/3 of patients
- **Adjuvant therapies**
  - Muscle relaxants
  - Trigger point injections
  - Pelvic floor botox
  - Sacral neuromodulation



Multimodal Pain Regimen

- **Medication therapies**
  - Acetaminophen
  - NSAIDs: ibuprofen, ketorolac, naproxen, celecoxib
  - Muscle relaxants: cyclobenzaprine, methocarbamol, tizanidine, baclofen
  - Centrally-acting: gabapentin, pregabalin, amitriptyline, duloxetine
  - Opioids?
- **Adjuvant therapies**
  - Trigger point injections
  - Pelvic floor botox
  - Bladder instillations
  - Behavioral health

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Initial Treatment Approach

Gynecologic	GI	Urologic	MSK	Nervous
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• Hormonal suppression • Surgical excision • Fertility-sparing vs. hysterectomy	• Fiber • FODMAP • Anti-spasmodics • GI referral	• IC/PBS diet • Bladder instillations • Systemic therapies • Urology ref	• PFPT • Muscle relaxants (oral and vaginal) • Trigger point / Botox injections • Pain Anesthesia	• Topical therapies • Systemic therapies • Behavioral therapy

Initiate evidence-based therapies for all pain sources!

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Follow up

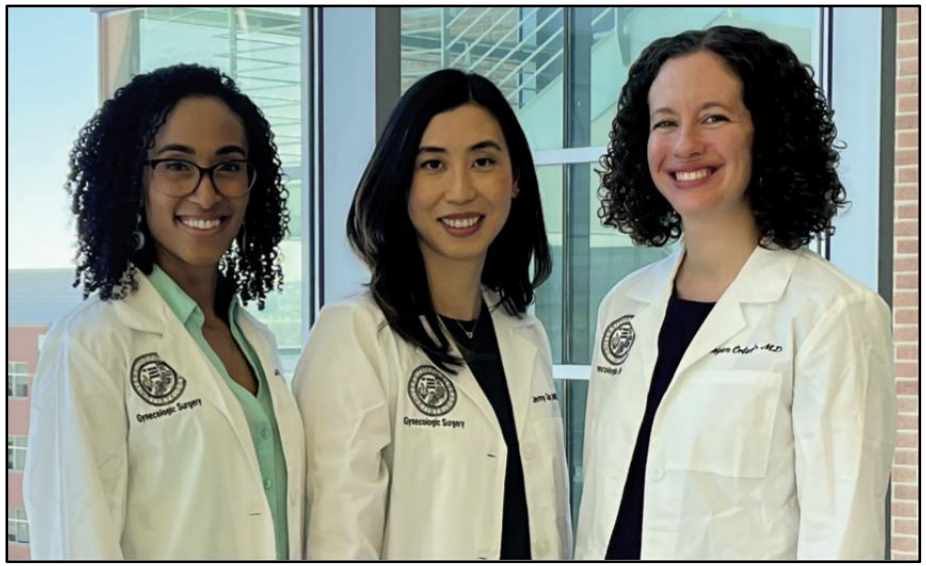
- Close interval follow up
  - Monthly if starting trigger point injections
  - Every 3-6 months if medication management
  - Discuss fertility goals and timeline
- Build chronic pelvic pain multidisciplinary care team
  - Pelvic floor physical therapy
  - Behavioral Health
  - GI, Urology, Pain Anesthesia, Pain Management, IR, REI
- Minimize repeat surgical intervention after complete excision

We Can Help

UCHealth Center for Endometriosis and Chronic Pelvic Pain

SERVICES WE OFFER:

- Advanced laparoscopic, robotic, vaginal, and hysteroscopic surgery
- Office-based procedures and interventions
- Medical and hormonal therapies
- Pelvic floor and myofascial injections
- Interdisciplinary care coordination



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CU Medicine Obstetrics & Gynecology – Central Park

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Thank you

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