



**The Lesser of Three Evils?
Untangling Somatic and Neurologic From Visceral Pain**

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Title & Affiliation

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Disclosure

- AbbVie, Myovant consultant
- The opinions expressed do not necessarily reflect those of the VA, U.S. Government, or any of its agencies
- Secretary 2021-2022
- Executive Board for the International Pelvic Pain Society



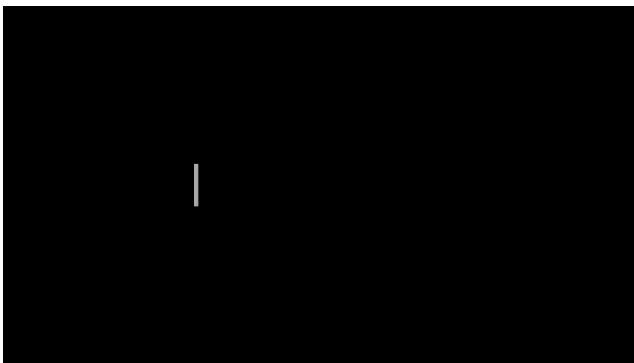
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Question

Why is this important?



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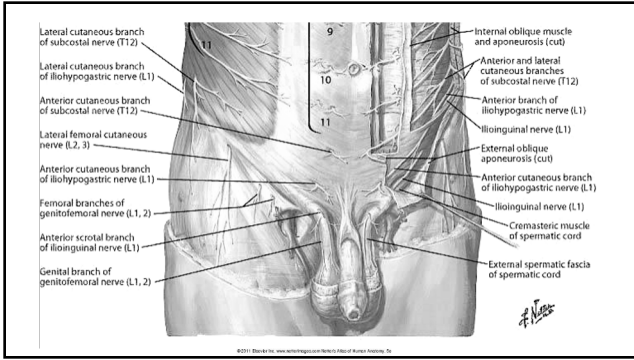
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Learning Objectives

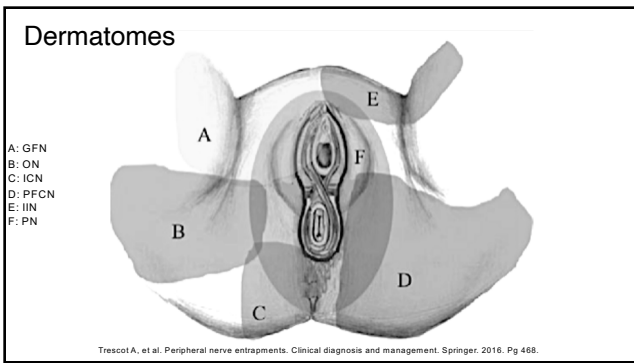
- Describe visceral pain from an anatomical and unique functional point of view
- Discuss components of a complete history intake for a CPP patient
- Identify tools available to collect and organize the information provided by CPP patients
- Review the components of a detailed physical exam to identify somatic, neurologic and visceral causes of CPP



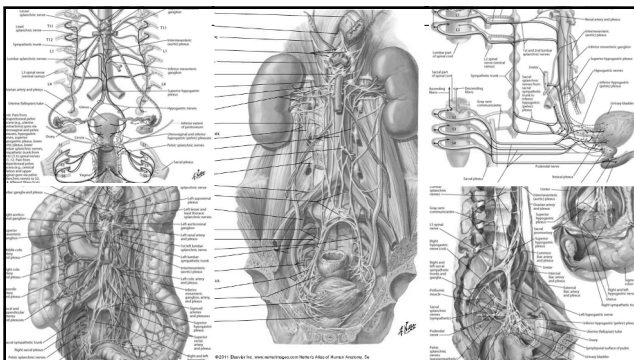
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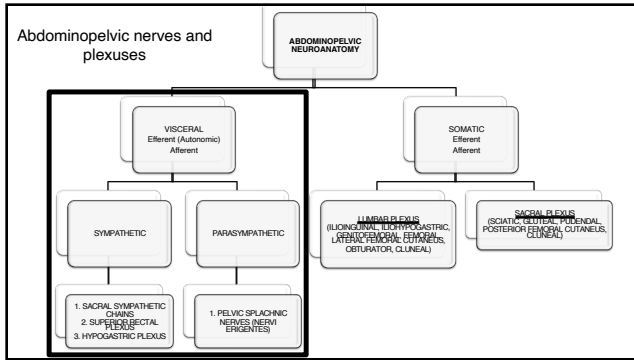
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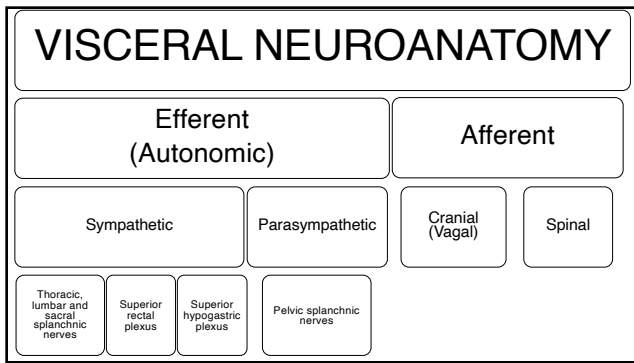
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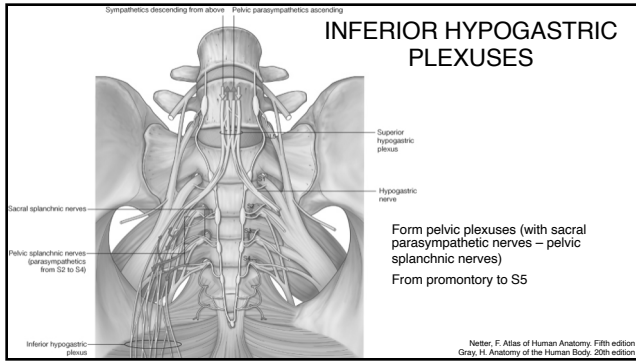
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Superior Hypogastric Plexus

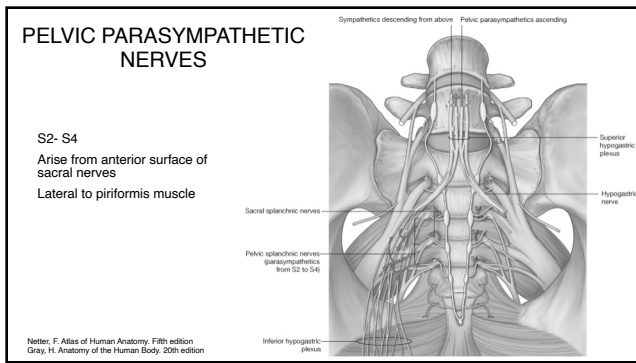
Sympathetic system (L1-L2)
 2 inferior hypogastric plexuses
 Efferent for uterus and bladder
 Interiliac trigone

Netter, F. Atlas of Human Anatomy. Fifth edition
 Gray, H. Anatomy of the Human Body. 20th edition

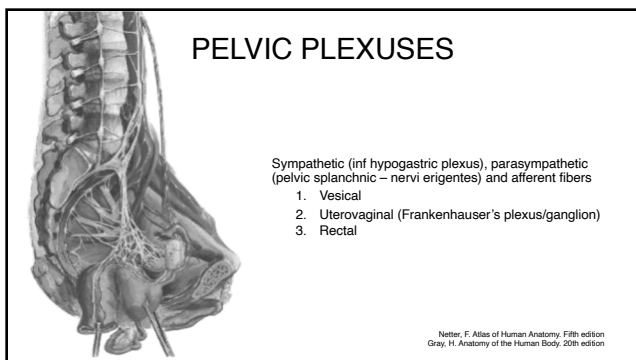
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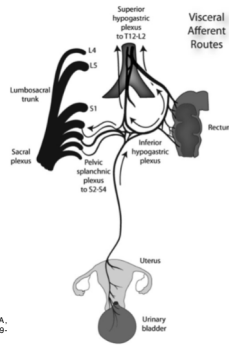


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Visceral afferent pathways of the Hypogastric Plexus

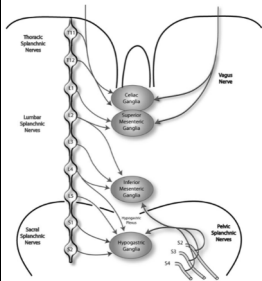


1. Pelvic splanchnic nerves
2. Hypogastric plexus – using a white ramus to access spinal nerves and spinal cord

Figure 2.19. Willard F, et al. Neuroanatomy of Female Pelvic Pain. 17-58. Bailey A, Bernstein C. (eds.), Pain in Women: A Clinical Guide, 17 DOI 10.1007/978-1-4419-7113-5_2. © Springer Science Business Media New York 2013

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Abdominopelvic autonomic nervous system



- Sympathetic fibers
 - From T12-L2
 - Sympathetic connected to spinal nerves
 - 3-4 ganglia each side
 - Anterior to sacrum
- Parasympathetic fibers
 - From Vagus and S2-S4

Fig. 2.15 The abdominopelvic autonomic nervous system. The abdominopelvic ganglia are positioned in the center of the diagram. The sympathetic trunk is represented on the left and the parasympathetic trunk on the right. The blue arrows are thoracic splanchnic nerves. The green arrows are lumbar splanchnic nerves, and the purple arrows are sacral splanchnic nerves. Even though the lower lumbar and sacral splanchnic nerves arise from the sympathetic trunk below L2, the cell bodies of origin for these nerves are located above L2 in the spinal cord, typically found between T12 and L2.

Willard F, et al. Neuroanatomy of Female Pelvic Pain. 17-58. Bailey A, Bernstein C. (eds.), Pain in Women: A Clinical Guide, 17 DOI 10.1007/978-1-4419-7113-5_2

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Visceral afferents for GI tract

According to location of receptive endings

- Mucosal
- Muscle or "tension sensitive"
- Muscle/mucosal "tension mucosal"
- Serosal
- Mesenteric

Majority are mechanosensitive → respond to distension and stretch, with low threshold for response. Also, chemoreceptors.



Gebhart GF. Physiology of Visceral Pain. Compr Physiol. 2016 Sep 15;6(4):1609-1633.

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Visceral afferents for Urinary tract

3 sets of nerves innervating lower tract

1. Sacral pathway
2. Hypogastric nerve (thoracolumbar pathway)
3. Pudendal nerve (external sphincter)

4 mechanosensitive afferents: serosal, muscle, muscle/urothelial and urothelial
Afferents more abundant in muscle than suburothelium, widely distributed at dome, body and trigone

Thoracolumbar pathway restricted to dorsal trigone and neck regions and suburothelium



Gebhart GF. Physiology of Visceral Pain. Compr Physiol. 2016 Sep 15;6(4):1609-1633.

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Visceral afferents for Urinary tract

“Silent nociceptors”

Afferents that are unresponsive to a noxious mechanical stimulus

Instillation of irritant substances into bladder sensitizes afferents to become mechanosensitive.



Gebhart GF. Physiology of Visceral Pain. Compr Physiol. 2016 Sep 15;6(4):1609-1633.

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Visceral afferents for Female reproductive organs

Hypogastric nerve (thoracolumbar and sacral pathway)

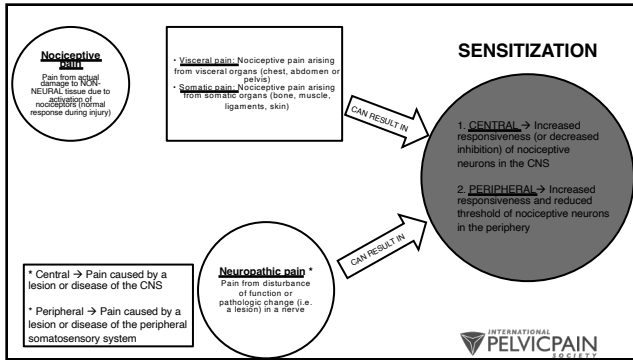
Majority of afferents are multimodal → respond to both mechanical (uterine distension, punctuate probing, stretching), and chemical stimuli

The intensity of pain varies depending on stage of estrus cycle



Gebhart GF. Physiology of Visceral Pain. Compr Physiol. 2016 Sep 15;6(4):1609-1633.

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Burden of visceral pain

Chest, abdomen, pelvic pain most common cause of physician consultation in US

>25 million ED visits and 2.5 million admissions/year

30% of US population reports pain > 6months, at least 30% report diseases of abdominal, pelvic or chest organs contributing to their pain

Negative impact QoL, drive healthcare cost and use, decrease productivity

Figure 1 Clinical and economic burden of abdominal and chest pain. Annual emergency room encounter (top panel) and hospitalizations (bottom panel) were abstracted from the Nationwide Emergency Room Database and the Nationwide Inpatient Sample. The results are based on discharge diagnosis codes that included abdominal (blue) or chest (black) pain.

Gebhart GF. Physiology of Visceral Pain. Compr Physiol. 2016 Sep 15;6(4):1609-1633

PainWeek

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General principles of visceral pain

1. Neurological mechanisms of visceral pain are different than those for somatic pain
2. The perception and psychological processing of visceral pain also differs from somatic pain

Cervero F, Laird JM. Visceral pain. Lancet 1999;353:2145-8

Laird JMA, Cervero F. Looking at visceral pain: New vistas. Scand J Pain. 2018 Jul 1;2(3):93-94.

PainWeek

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Clinical characteristics

1. Not evoked from all viscera
2. Not always linked to visceral injury
3. Diffuse and poorly localized
4. Is referred to other locations
5. Usually accompanied with motor and autonomic reflexes (nausea, vomiting, lower back muscle tension)
6. Responses to painful visceral stimuli are much slower and longer lasting
7. Often intermittent in nature with acute episodes of intense pain inter spread with periods of less pain



Cervero F, Laird JM. Visceral pain. Lancet 1999;353:2145-8
 Cervero F. Visceral versus somatic pain: similarities and differences. Dig Dis. 2009;27 Suppl 1:3-10.
 Laird JMA, Cervero F. Looking at visceral pain: New vistas. Scand J Pain. 2018; Jul 1;2(3):93-94.

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Type of stimuli eliciting pain from visceral fibers

Pain arises from stimuli including:

- Hollow organ stretch/distension
- Traction on mesentery
- Organ hypoxia/ischemia
- Chemical stimuli (inflammatory process)

Nociception in viscera is different than in skin (other organs)

Cutting, pinching, burning adequate for cutaneous nociceptors, not reliable for viscera



Gebhart GF. Physiology of Visceral Pain. Compr Physiol. 2016 Sep 15;6(4):1609-1633.

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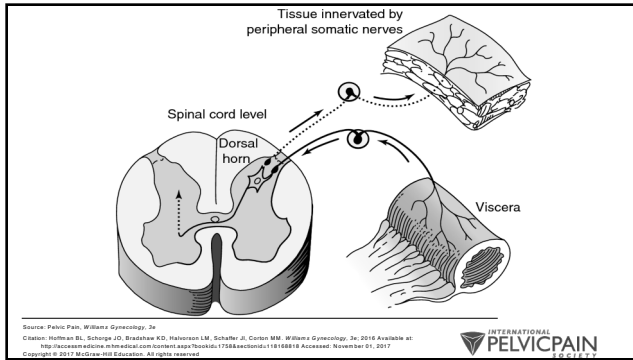
Viscerosomatic convergence

Underlies referred visceral pain – sending pain sensations distant to primary site
 Noxious stimulation of viscera triggers pain referred to somatic sites
 Somatic injury and visceral inflammation can alter central processing of visceral and somatic inputs



Sikander S, Dickenson AH. Visceral pain: the ins and outs, the ups and downs. Curr Opin Support Palliat Care. 2012 Mar;6(1):17-26. doi: 10.1097/SPC.0b013e32834f6ec9.

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TABLE 1. Peripheral Somatic Sensory Nerve Dermatomes with Corresponding Visceral Sensory Nerve Convergence-Projection Fields

Somatic Nerve	Dermatome	Visceral Field
Iliohypogastric	T12-L1	Ovary, distal fallopian tube
Ilioinguinal	L1-2	Proximal tube, uterine fundus
Genitofemoral	L1-2	Proximal tube, uterine fundus
Lateral femoral cutaneous	L2-3	Fundus, lower uterine segment
Pudendal	S2-4	Lower uterine segment, cervix, bladder, distal ureter, upper vagina, rectum

Perry CP. Peripheral neuropathies and pelvic pain: diagnosis and management. Clin Obstet Gynecol. 2003 Dec;46(4):789-96

INTERNATIONAL PELVIC PAIN SOCIETY

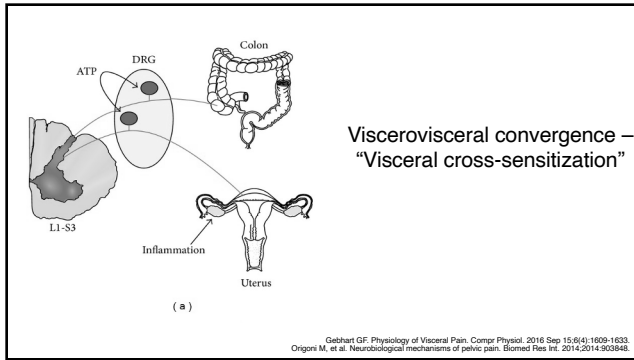
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Viscerovisceral convergence – “Visceral cross-sensitization”

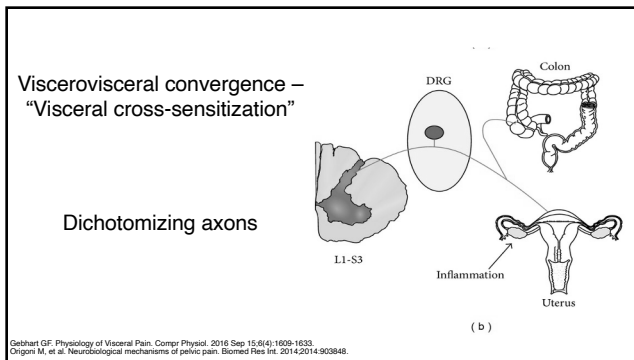
Transmission of noxious stimulus from diseased pelvic organ to adjacent normal structure → functional changes (CPP)
 Between GI, GU and reproductive organs
 Convergence occurs via both peripheral and central mechanisms
 –Peripheral → DRG
 –Central → Spinal cord and brain

PainWeek Ozgen M, et al. Neurobiological mechanisms of pelvic pain. Biomed Res Int. 2014;2014:903848. Willard F, et al. Neuroanatomy of Female Pelvic Pain. 17-58. Bailey A, Bernstein C, (eds.). Pain in Women. A Clinical Guide. 17. DOI: 10.1007/978-1-4419-7113-5_2. © Springer Science Business Media New York 2013

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Mechanisms of persistent pain

1. Cross-System
2. Neurogenic inflammation and peripheral sensitization
3. Central sensitization → Visceral hyperalgesia

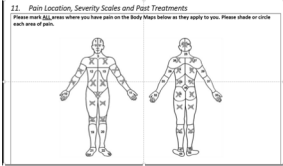
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Gebhart GF. Physiology of Visceral Pain. Compr Physiol. 2016 Sep 15;6(4):1609-1633.
Sikandar S, Dickenson AH. Visceral pain: the ins and outs, the ups and downs. Curr Opin Support Palliat Care. 2012 Mar;6(1):17-26.
Orlowski M, et al. Neurobiological mechanisms of pelvic pain. Biomed Res Int. 2014;2014:903948.

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Suspect Central Sensitization if...

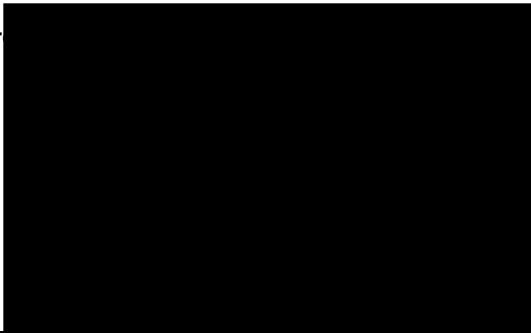
- Pain at multiple sites in the body
- Multiple pain diagnoses
- Hyperalgesia / Allodynia
- Pain associated with psychiatric or emotional dysfunction
- Opioids not effectively reduce pain
- Pain does not respond to peripheral therapies



Levoque A, Runt T, Prosser S, Rigaud J, Luber J, for Consensus: PP Network. Clinical Criteria of Central Sensitization in Chronic Pain and Persistent Pain (Consensus: PP Criteria): Elaboration of a Clinical Evaluation Tool Based on Formal Expert Consensus. Pain Med. 2018 Mar; 7. doi: 10.1093/pm/pny030.

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Chr



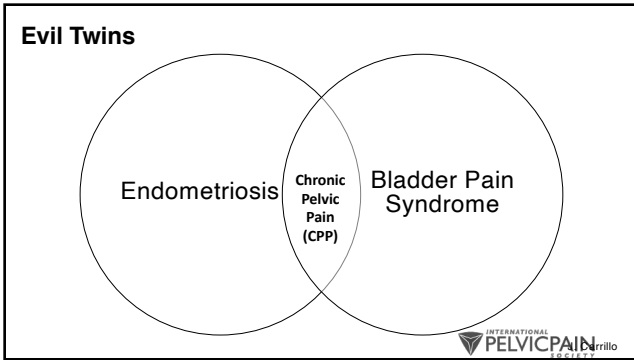
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Question

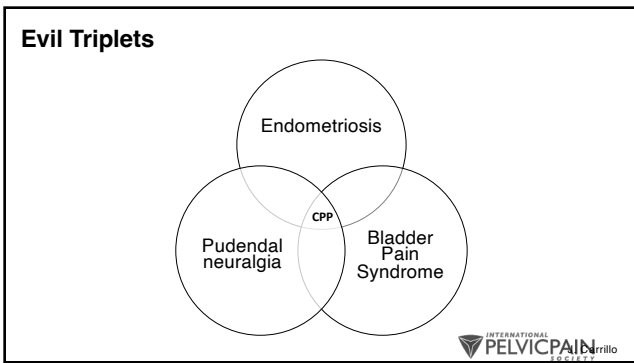
What if these conditions are not diagnosed?



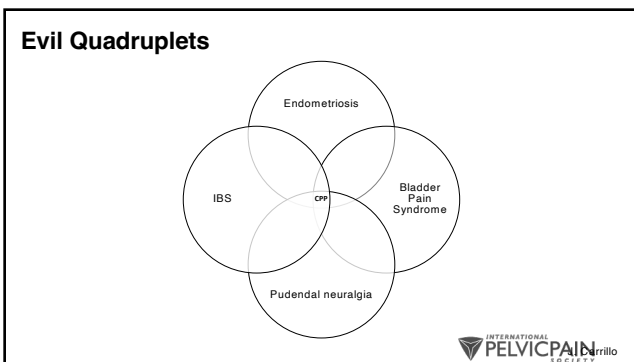
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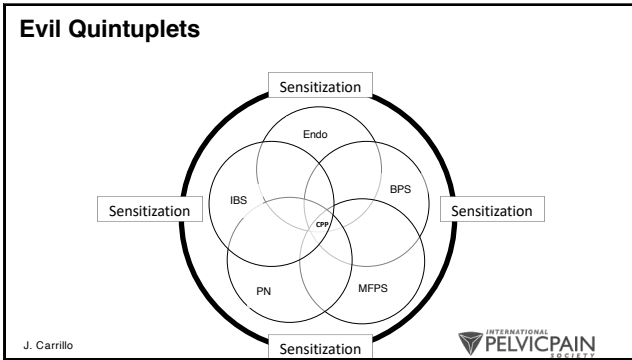
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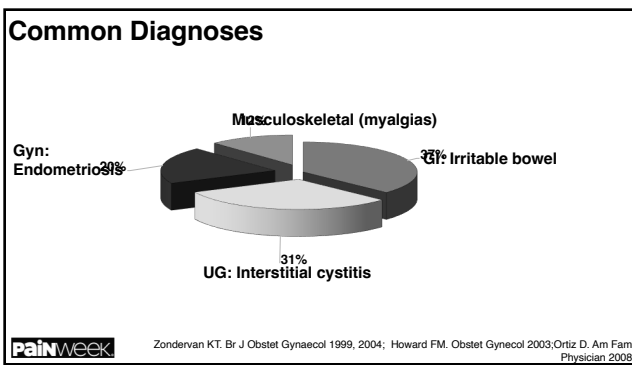
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Co-occurrence of chronic pelvic pain diagnosis

Diagnosis	Endo	IC/PBS	IBS	VVS
Endo	18%	32%	31%	18%
IC/PBS	38%	6%	28%	28%
IBS	41%	31%	6%	24%
VVS	26%	36%	27%	7%

Diutz & Howard, JGIM 2010; 18:219-7.

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Question

How differentiate somatic, visceral and neuropathic?

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IPPS Pelvic health history Form

1. Contact information	10. Pain history, description, contributing factors
2. Referring provider's name and contact information	11. Pain location, severity scales and past treatments (pain map, Short McGill questionnaire, VAS, Pain intensity scale short form, Pain catastrophizing scale, PROMIS sexual function profile –female and male-, PROMIS global health)
3. Demographic information	12. GI history (Rome IV, Bristol)
4. Medical history	13. Additional symptoms and diagnosis (Nantes criteria, COPC's)
5. Surgical history	14. Urinary history (PUF, Chronic Prostatitis Symptom index)
6. Menstrual, birth control and STI history	15. Psychosocial history (DASS-21)
7. Allergies and current medications	
8. Pregnancy / OB history	
9. Family history	

PainWeek www.painweek.org/PPS/Content/Professional/Documents_and_Forms.aspx?hkey=2597ab99-df83-40ee-89cd-7bd384efed19

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PAP'S

www.pelvicpain.org/PPS/Professional/Documents_and_Forms/PPS/Content/Professional/Documents_and_Forms.aspx?hkey=2597ab99-df83-40ee-89cd-7bd384efed19

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PAP's


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Pain

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Pain

Monodimensional → **VAS**, NRS, VNRS
 Mutidimensional → **MPQ**, SF-MPQ, **PROMIS**
 Onset
 Location → **Pain map**
 Scale
 Frequency
Quality
Worsening / Improving factors
 Previous treatments (helped?)
Neuropathic pain → **Neuropathic Pain scale**, PainDETECT, Leeds Assessment of neuropathic symptoms and signs (LANSS Pain scale), Neuropathic Pain symptoms Inventory (NPSI), Neuropathic Pain Diagnostic Questionnaire (DN4), Nantes criteria



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PAP's


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Associated organs/systems

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Associated organs/systems

Cyclic vs Non-cyclic
 Organ specific questionnaires → **PUF, O'Leary-Sant.**
 Bladder Pain/Interstitial Cystitis Symptom score, Pelvic
 Pain Assessment Form, NIH-CPSI, GUPI, CPPQ-Mohedo,
 UPOINT, **Vulvodynia, Rome IV criteria**



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PAP's


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Psycho/social impact

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Psycho/social Impact

SF-36, EQ-5D, **MPQ**, Pain disability Index, PIQ-6, **Sexual functioning self-assessment**, Behavior Illness questionnaire, Hamilton Psychiatric Rating Scale for Depression, **Beck depression inventory**, HADS, **Catastrophizing**, **PEG-3 questions**, **Sexual trauma and/or PTSD**



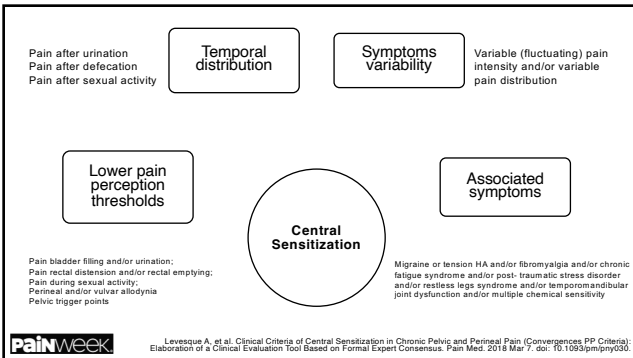
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PAP's

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Sensitization

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Sandra - 50 y/o G0P0
"Pelvic pain"

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What makes your pain WORSE? (Check *all* that apply)

Walking Climbing stairs Urination Heavy lifting Nothing makes it worse
 Full bladder Stress Housework The weather Getting in/out of the car
 Exercise Menstrual period Contact with clothing Intercourse/ Sexual contact
 Bowel movements Other: _____

What makes your pain BETTER? (Check *all* that apply)

Lying down/rest Emptying bladder Ice or Heating pad Nothing makes it better
 Meditation Laxatives/enema It goes away by itself When I feel supported
 Hot bath Massage Bowel movements When my stress is low
 Exercise Ibuprofen or Tylenol Prescription pain medications
 Being distracted, when I am busy doing other things Other: _____

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Rate the SEVERITY of YOUR PAIN (YOUR WORSE OR MAIN PAINFUL AREA) on the scales below:

In the past 7 days...

	Had no pain	Mild	Moderate	Severe	Very severe
1. How intense was your pain at its worst?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
2. How intense was your average pain?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
3. What is your level of pain right now?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

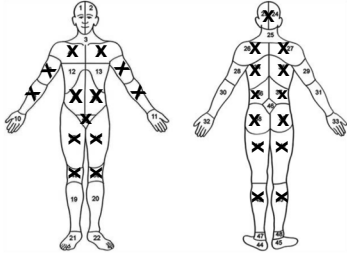
Mark the one box that describes how much, during the past week, pain has interfered with:

	0= does NOT interfere					completely interferes=10					
General activity	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
Mood	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input checked="" type="checkbox"/> 9	<input type="checkbox"/> 10
Walking activity	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
Normal activity (outside the home or with housework)	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input checked="" type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
Relations with other people	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
Sleep	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input checked="" type="checkbox"/> 8	<input type="checkbox"/> 9	<input type="checkbox"/> 10
Enjoyment of life	<input type="checkbox"/> 0	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7	<input type="checkbox"/> 8	<input type="checkbox"/> 9	<input checked="" type="checkbox"/> 10

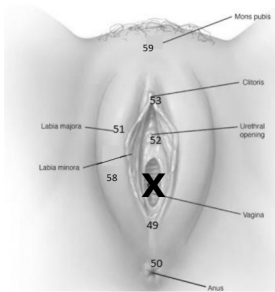
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11. Pain Location, Severity Scales and Past Treatments

Please mark ALL areas where you have pain on the Body Maps below as they apply to you. Please shade or circle each area of pain.



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Short McGill Questionnaire

List each pain location number from the body map in the first column. Then, select the length, quality and severity of pain at each location. [IF YOU HAVE MORE THAN 3 AREAS OF PAIN, FILL THIS FOR YOUR 3 WORSE AREAS]

Example			
(If 1 is by your pelvis it means the pain is in your pelvis) 1	<input type="checkbox"/> 1 year <input checked="" type="checkbox"/> 1-3 years <input type="checkbox"/> 4-7 years <input type="checkbox"/> 8-10 years <input type="checkbox"/> More than 10 years	<input checked="" type="checkbox"/> Throbbing <input type="checkbox"/> Shooting <input type="checkbox"/> Stabbing <input type="checkbox"/> Sharp <input type="checkbox"/> Cramping <input type="checkbox"/> Gnawing <input type="checkbox"/> Hot-Burning <input checked="" type="checkbox"/> Aching <input type="checkbox"/> Heavy <input type="checkbox"/> Tender <input type="checkbox"/> Splitting <input type="checkbox"/> Tingling-Exhausting <input type="checkbox"/> Sickening <input type="checkbox"/> Fearful <input type="checkbox"/> Punishing-Cruel	<input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Severe
Location Number: 14-15	<input type="checkbox"/> 1 year <input type="checkbox"/> 1-3 years <input type="checkbox"/> 4-7 years <input type="checkbox"/> 8-10 years <input checked="" type="checkbox"/> More than 10 years	<input checked="" type="checkbox"/> Throbbing <input type="checkbox"/> Shooting <input checked="" type="checkbox"/> Stabbing <input type="checkbox"/> Sharp <input checked="" type="checkbox"/> Cramping <input type="checkbox"/> Gnawing <input type="checkbox"/> Hot-Burning <input type="checkbox"/> Aching <input type="checkbox"/> Heavy <input type="checkbox"/> Tender <input type="checkbox"/> Splitting <input type="checkbox"/> Tingling-Exhausting <input checked="" type="checkbox"/> Sickening <input checked="" type="checkbox"/> Fearful <input type="checkbox"/> Punishing-Cruel	<input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Severe
Location Number: 54	<input type="checkbox"/> 1 year <input type="checkbox"/> 1-3 years <input type="checkbox"/> 4-7 years <input checked="" type="checkbox"/> 8-10 years <input type="checkbox"/> More than 10 years	<input type="checkbox"/> Throbbing <input type="checkbox"/> Shooting <input checked="" type="checkbox"/> Stabbing <input checked="" type="checkbox"/> Sharp <input checked="" type="checkbox"/> Cramping <input type="checkbox"/> Gnawing <input type="checkbox"/> Hot-Burning <input checked="" type="checkbox"/> Aching <input type="checkbox"/> Heavy <input type="checkbox"/> Tender <input type="checkbox"/> Splitting <input type="checkbox"/> Tingling-Exhausting <input type="checkbox"/> Sickening <input checked="" type="checkbox"/> Fearful <input checked="" type="checkbox"/> Punishing-Cruel	<input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Severe

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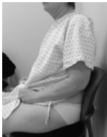
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Please read each statement and circle a number 0, 1, 2, or 3 which indicates how much the statement applied to you over the past week. There are no wrong or right answers, do not spend too much time on any statement.

Depression, Anxiety and Stress Scale

	Not at all	Some of the time	A good part of the time	Most of the time
I found it hard to wind down S	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I was aware of dryness of my mouth A	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I couldn't seem to experience any positive feeling at all D	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion) A	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I found it difficult to work up the initiative to do things D	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I tended to overreact to situations S	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I experienced trembling (e.g. in the hands) A	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I felt that I was using a lot of nervous energy S	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I was worried about situations in which I might panic and make a fool of myself A	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I felt that I had nothing to look forward to D	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I found myself getting agitated S	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I found it difficult to relax S	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I felt down-hearted and blue D	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I was intolerant of anything that kept me from getting on with what I was doing S	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I felt I was close to panic A	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I was unable to become enthusiastic about anything D	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I felt I wasn't worth much as a person D	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I felt that I was rather touchy S	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I was aware of the action of my heart in the absence of physical exertion (e.g. a sense of heart rate increase, heart missing a beat) A	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I felt scared without good reason A	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
I felt that life was meaningless D	<input type="radio"/> 0	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3

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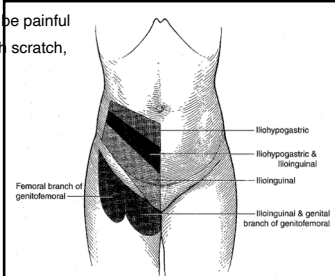

Exam

Standing – Sitting –
Supine – Stirrups

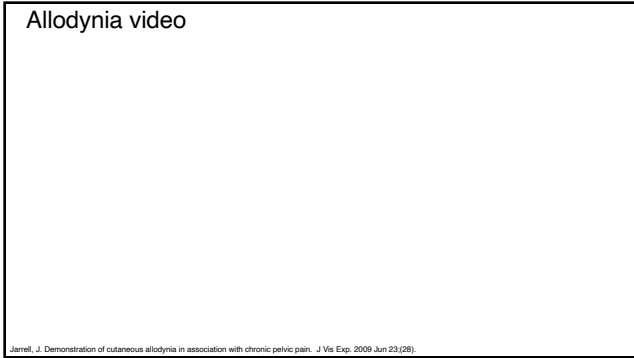
68

Allodynia

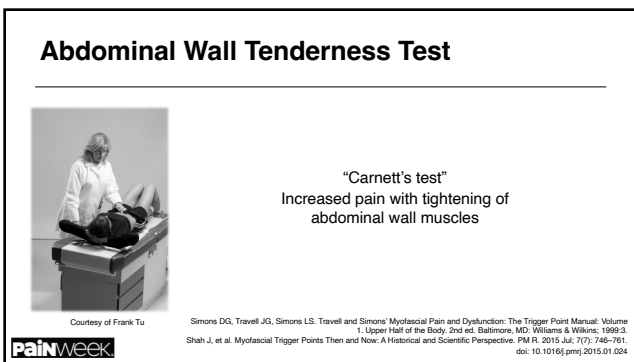
Pain due to a stimulus that should not be painful
Superficial abdominal examination with scratch, pinch, & light touch



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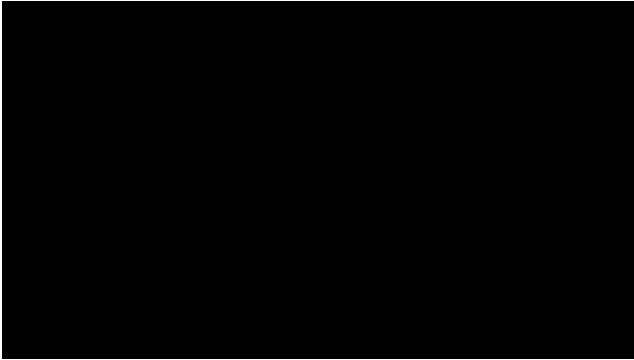
70



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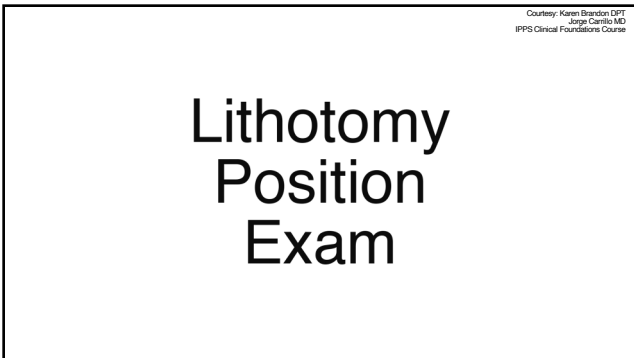
72



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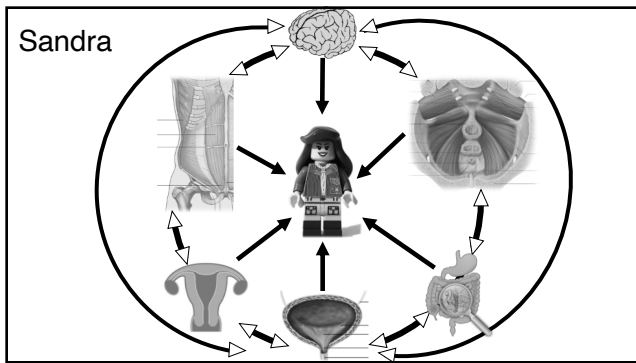
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Condition	Endometriosis	IC/BPS	IBS / DGBI Disorders of Gut-Brain Interaction	Myofascial pain syndrome	Pudendal Neuralgia	Sensitization
Features						
Diagnosis	Clinical Surgical	Clinical—rule out other conditions	ROME IV	Carnet's test positive Tenderness upon palpation of pelvic floor muscles Trigger points	Clinical (Nantes criteria)	Clinical
Symptoms	Dysmenorrhea Cyclical symptoms Adnexal mass Infertility	Suprapubic discomfort and urinary symptoms	Recurrent abd pain/discomfort 1d/wk in last 3 mo + 2 or more → related to defecation, change in freq, change in form	Cramping, stabbing, shooting, autonomic symptoms, radiated pain Worse with physical activity Deep dyspareunia	Burning, hot, "raw skin" sensation PN Dyspareunia Allodynia (cloth, tampon)	Pain at multiple sites in the body Behavioral/mood changes Eating/sleeping disturbance Associated symptoms
Physical exam	CMT Uterine tenderness Adnexal mass Frozen pelvis RV nodules	Suprapubic tenderness Bladder pain	Diffuse abdominal tenderness	Abdominal wall, pelvic floor muscles, para lumbar and/or gluteal focal tenderness Carnet's test positive Trigger points Single digit exam tenderness	Allodynia/Hyperalgesia in distribution of PN Valleix sign	Multiple tender points Hyperalgesia Allodynia
Labs/Imaging	TVUS MRI	UA/CS Cystoscopy (hem)	Colonoscopy	n/a	MRN	n/a
Treatment	Therapeutic alliance and shared decision-making - Patient education - Lifestyle modifications - Self/management strategies					
	Hormonal suppression Surgery	Diet Medications (TCA's, mast cell inhibitors, PPS), instillations	Diet Stimulants Bulking agents Antispasmodics	PT Muscle relaxants Injections (TPI, Botox)	Medications (topical, oral) Anticonvulsants Nerve blocks Surgical release	BIT-CBT Mindfulness Medications (TCA's), NSRI's, SNRI's, anticonvulsants

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Conclusions

- **Not all** abdominopelvic **pain is visceral** in nature
- **Validation, communication and screening** for dysfunction / co-morbidities are key elements when evaluating a CPP patient
- **A detailed physical exam** provides significant and relevant information at the time of evaluating a chronic pelvic pain patient
- Due to the **multifactorial** component of CPP, patients benefit from an **interdisciplinary team and a biopsychosocial approach**



PainWeek

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Action Items

- Familiarize yourself more with CPP co-morbidities
(Lamvu G, Carrillo J, Ouyang C, Rapkin A. Chronic Pelvic Pain in Women: A Review. JAMA. 2021;325(23):2381–2391. doi:10.1001/jama.2021.2631)
- Don't forget the musculoskeletal component
Suspect and try to identify central sensitization
- Identify a team of healthcare professionals capable to support your treatment plans

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PainWeek

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