



Community of Practice in Family Medicine: Chronic Pain

FMF 2015
Chronic Pain Management Symposium

FMF 2015 Chronic Pain Management Symposium

9:45 - 10:15	All Chronic Pain Is Not the Same: Making an accurate pain diagnosis – Dubin /Jovey
10:15 - 10:45	Making It Real: Function and goal setting in a chronic pain patient - Hatcher
11:15 - 11:45	Options, Options, Who Has the Options? Non-opioid treatments for chronic pain - Hollett
11:45 - 12:15	Chronic Pain: Optimizing opioids, reducing risks - Jovey
13:45 - 14:15	Cannabinoids and Chronic Pain - Ware
14:15 - 14:45	Addiction in Chronic Pain - Bordman

Not All Chronic Pain is the Same

Making an accurate pain diagnosis
Dr. Ruth Dubin
Dr Roman Jovey
Family Medicine Forum – Nov 2015

Conflict of Interest Declaration – Dr. Ruth Dubin

- No relationships with industry
- Co-Chair ECHO Ontario which is funded by the Ministry of Health of Ontario

Conflict of Interest Disclosure - Dr. Roman D. Jovey

- Grants/Research Support: none
- Speakers Bureau/Consulting: Astra-Zeneca, Bayer, Biovail, Boehringer-Ingelheim, GlaxoSmithKline, Janssen, King, Lilly, Medical Futures, Merck-Frost, Mundipharma, Nycomed, Palladin, Pfizer, Purdue-Pharma, Sanofi-Aventis, Tribute Pharma, Valeant, Wyeth
- Medical Director: CPM Centres for Pain Management

Learning Objectives

At the end of this session participants will be able to:

- utilize a Clinically Organized Relevant Exam to effectively assess patients with low back pain
- perform a focused pain exam to detect myofascial, neuropathic, and central sensitization pain
- formulate a specific pain diagnosis (beyond "low back pain")
- explain the importance of a biopsychosocial approach to chronic pain management to patients

Ralph:

37 y.o construction worker

- your patient since his early 20's
- several work-related back injuries, with flare ups previously managed by NSAIDs and a few days off work.
- four months ago - fall at work
- X-rays: minor Degenerative Disc Disease
- After WSIB rehab, still unable to return to work.
- employer has no modified duties for him
- WSIB is telling him that he must return to work or lose his benefits.



Ralph: Back in your office

- severe low back pain that radiates up his back as well as part way down his right leg – seems to have spread to his neck
- his wife is getting on his case - unable to do his household chores
- trouble meeting their monthly expenses (stress!)
- complaining of insomnia / depressed mood
- requesting something stronger for the pain and an MRI of his back
- a buddy had surgery for a "slipped disc" and is better
 - he also wants a referral to his buddy's surgeon



What's the best thing to do next?

- A) he is not getting better so do the MRI
- B) prescribe some Percocet and R/C in 1 month
- C) refer to the surgeon – (wait list 12 months)
- D) spend some time reassessing his pain



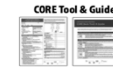
Announcing the Official Launch Low Back Pain Toolkit

Created for Effective Practice in partnership with the Government of Ontario to improve the overall assessment of Low Back Pain (LBP) through the use of the evidence-based components of the strategy, a toolkit has been developed for primary care providers.

This toolkit was developed to assist with the assessment and management of patients with low back pain in primary care settings.

Includes the
NEW! CORE Back Tool
developed by
Drs Julia Alleyne,
Hamilton Hall &
Raja Rampersaud

Developed by providers & for providers



Supporting tools include:

- ✓ Opioid Risk Tool
- ✓ Patient Education Inventory
- ✓ Personal Action Planning for Patient Self-Management
- ✓ The Keele Star? Back Screening Tool

Built from existing evidence and tools. Available for download in French and in black & white

To access the complete toolkit, visit
www.effectivepractice.org/lowbackpain OR ontario.ca/lowbackpain



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**LOW BACK PAIN STRATEGY
Clinically Organized Relevant
Exam (CORE) Back Tool**

Patient Name: _____ Age: _____
Provider Name: _____ Date: _____
Provider: ☐ FP ☐ NP

A. HISTORY

- Where is your pain the worst?
☐ Back Dominant - Buttock
☐ Leg
- Is your pain:
☐ Intermittent
☒ Constant → Rule out red flags
- Does bending forward increase your typical back or leg pain?
☐ Yes
☒ No
- Have you had any unexpected accidents with your bowel or bladder function since this episode of your low back/leg pain started?
☐ Yes → Rule out cauda equina syndrome
☒ No
- If age of onset < 45 years, are you experiencing morning stiffness in your back > 30 minutes?
☐ Yes → Systemic inflammatory arthritis screen
☒ No

B. SCREENING

Red Flags (check if positive) ☐ No Red Flags

- ☒ Neurological: diffuse motor/sensory loss, progressive neurological deficits, cauda equina syndrome
- ☒ Infection: fever, IV drug use, immune suppressed
- ☒ Fracture: trauma, osteoporosis risk
- ☒ Tumour: hx of cancer, unexplained weight loss, significant unexpected night pain, significant fatigue
- ☒ Inflammation: chronic low back pain > 3 months, age of onset < 45, morning stiffness > 30 minutes, improvement with exercise, disproportionate night pain

Radiology Criteria (check if positive) ☐ No Radiology Criteria

Have you had any previous imaging done?
☐ Yes → Results: _____
☒ No

Suggested Imaging for Suspected Pathology:

- ☒ X Ray: suspected trauma or fragility fracture
- ☒ MRI: functionally significant or progressive neurological deficits, tumour, unresponsive radicular syndrome, neurogenic claudication, cauda equina syndrome
- ☒ Bone Scan: infection, systemic inflammatory process

C. PHYSICAL EXAMINATION

This tool will guide the clinician to recognize common mechanical back pain syndromes and screen for other conditions where management may include investigation, referral and specific medications. This is a focused examination for clinical decision-making in primary care.

	Normal	Abnormal	Comments
Standing Gait	Heel walking (L4-5) Toe walking (S1)		
Sitting	Movement testing in flexion Movement testing in extension Brendelburg test (L5) Repetitive toe raises (S1)		
Interleaving	Patellar reflex (L3-4) Quadriceps power (L3-4) Ankle dorsiflexion power (L4-5) Great toe extension power (L5) Great toe flexion power (S1) Plantar response, upper motor test		
Lying	Ankle reflex (S1) Supine Passive straight leg raise Passive hip range of motion Prone Femoral nerve stretch (L3-4) Gluteus maximus power (S1) Sacroiliac compression testing (S2-3-4) Passive back extension (Patient can attempt to elevate upper body)		

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Ralph

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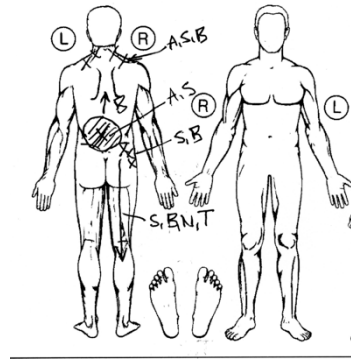
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- ☐ Neurological: diffuse motor/sensory loss, progressive neurological deficits, cauda equina syndrome
- ☐ Infection: fever, IV drug use, immune suppressed
- ☐ Fracture: trauma, osteoporosis risk
- ☐ Tumour: hx of cancer, unexplained weight loss, significant unexpected night pain, significant fatigue
- ☐ Inflammation: chronic low back pain > 3 months, age of onset < 45, morning stiffness > 30 minutes, improvement with exercise, disproportionate night pain

Ralph's pain

• Pain descriptors:

- Aching
- Stabbing
- Numbness
- Burning
- Tingling



BPI – Pain Scores

Please rate your pain by circling the one number that best describes your pain at its **WORST** in the past 24 hours.

No pain 0 1 2 3 4 5 6 7 8 9 10 Worst pain you can imagine

Please rate your pain by circling the one number that best describes your pain at its **LEAST** in the past 24 hours.

No pain 0 1 2 3 4 5 6 7 8 9 10 Worst pain you can imagine

Please rate your pain by circling the one number that best describes your pain on the **AVERAGE**.

No pain 0 1 2 3 4 5 6 7 8 9 10 Worst pain you can imagine

Please rate your pain by circling the one number that tells how much pain you have **RIGHT NOW**.

No pain 0 1 2 3 4 5 6 7 8 9 10 Worst pain you can imagine

In the last 24 hours, how much relief have your pain treatments or medications provided?

Please circle the one percentage that shows most how much **RELIEF** you have received.

No relief 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Complete relief

BPI-Interference or Pain Disability Index

Circle the one number that describes how, during the past 24 hours, pain has interfered with you:

A. General Activity:

Does not interfere 0 1 2 3 4 5 6 7 8 9 10 Completely interferes

B. Mood:

Does not interfere 0 1 2 3 4 5 6 7 8 9 10 Completely interferes

C. Walking Ability:

Does not interfere 0 1 2 3 4 5 6 7 8 9 10 Completely interferes

D. Normal Work (includes both work outside the home and household)

Does not interfere 0 1 2 3 4 5 6 7 8 9 10 Completely interferes

E. Relations with other people:

Does not interfere 0 1 2 3 4 5 6 7 8 9 10 Completely interferes

F. Sleep:

Does not interfere 0 1 2 3 4 5 6 7 8 9 10 Completely interferes

G. Enjoyment of Life:

Does not interfere 0 1 2 3 4 5 6 7 8 9 10 Completely interferes

52/70

= 7.7 / 10

s-LANSS

Only circle responses that describe any of your pain(s).

1. In the area where you have pain, do you also have 'pins and needles', tingling or prickling sensations?

a) NO - I don't get these sensations 0

b) YES - I get these sensations often 3

2. Does the painful area change colour (perhaps looks mottled or more red) when the pain is particularly bad?

a) NO - The pain does not affect the colour of my skin 0

b) YES - I have noticed that the pain does make my skin look different from normal 3

3. Does your pain make the affected skin abnormally sensitive to touch? Getting unpleasant sensations or pain when lightly stroking the skin might describe this.

a) NO - The pain does not make my skin in that area abnormally sensitive to touch 0

b) YES - My skin in that area is particularly sensitive to touch 3

4. Does your pain come on suddenly and in bursts for no apparent reason when you are completely still? Words like 'electric shocks', jumping and burning might describe this.

a) NO - My pain doesn't really feel like this 0

b) YES - I get these sensations often 3

5. In the area where you have pain, does your skin feel unusually hot like 'burning pain'?

a) NO - I don't have burning pain 0

b) YES - I get burning pain often 3

6. Gently rub the painful area with your index finger and then rub a non-painful area (for example, an area of skin further away or on the opposite side from the painful area). How does this rubbing feel in the painful area?

a) The painful area feels no different from the non-painful area 0

b) I feel discomfort, like pins and needles, tingling or burning in the painful area that is different from the non-painful area 3

7. Gently press on the painful area with your finger tip then gently press in the same way onto a non-painful area (the same non-painful area that you chose in the last question). How does this feel in the painful area?

a) The painful area does not feel different from the non-painful area 0

b) I feel numbness or tenderness in the painful area that is different from the non-painful area 3

Total s-LANSS Score: 12

Score < 12, neuropathic mechanisms are unlikely to be contributing to the pain problem.

Score > or equal to 12, neuropathic mechanisms likely contributing to the pain problem.

Source: Bennett, M et al. The Journal of Pain, Vol 6, No 3 (March, 2005) pp 180-188 The s-LANSS score for Identifying Pain of Predominantly Neuropathic Origin: Validation for Use in Clinical and Pain Research The Journal

<http://www.ihe.ca/research-programs/hta/aagap/lbp>



3-Minute Primary Care Low Back Exam (Part I)

Institute of Health Economics
Subscribe 244

46,194

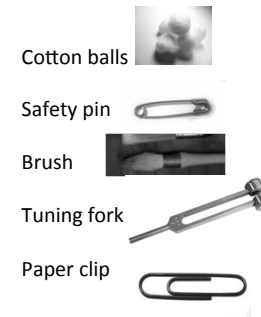
C. PHYSICAL EXAMINATION				
		Normal		Comments
		Normal	Abnormal	
Standing	Gait	Heel walking (L4-5) Toe walking (S1)		
	Movement testing in flexion		X	
	Trendelenburg test (L5) Repetitive toe raises (S1)	X		
Sitting	Patellar reflex (L3-4)	X		
	Quadriceps power (L3-4)	X		
	Ankle dorsiflexion power (L4-5) Great toe extension power (L5) Great toe flexion power (S1) Plantar response, upper motor test	X X X X		
Kneeling	Ankle reflex (S1)			
Lying	Supine			
	Passive straight leg raise	X		back and buttock pain
	Passive hip range of motion			
Prone	Femoral nerve stretch (L3-4)			
	Gluteus maximus power (S1)			
	Saddle sensation testing (S2-3-4) Passive back extension (patient uses arms to elevate upper body)	X		

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More Detailed Physical Exam

- Observation
 - Gait, movement,
- BMI, abdominal circumference
- Neurological: sensory,
- Leg Length Discrepancy
- Core Strength testing
- Flexibility testing
- Palpation: bone, ligaments, myofascial trigger points, fibromyalgia.
- Special tests
 - Piriformis
 - SI Joint Dysfunction

Neurosensory exam

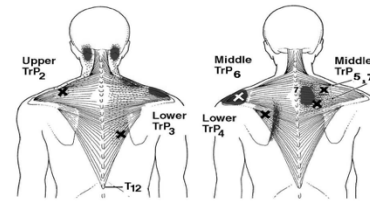


The pain sensory exam by Dr. Pam Squire



http://www.youtube.com/watch?v=DRg_zgYnnl8&feature=youtu.be

Myofascial Trigger Points

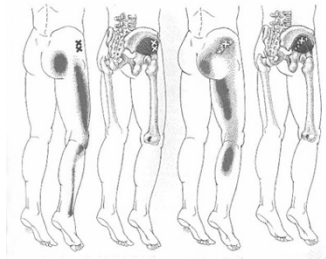


...are hyperirritable spots in the fascia surrounding skeletal muscle. They are associated with palpable nodules in taut bands of muscle fibers.

Travell & Simons. Myofascial Pain. The Trigger Point Manual, 1998

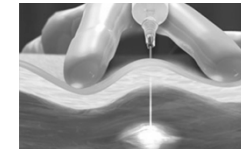
Copeland. Fibromyalgia and Chronic Myofascial Pain. 2001

Ralph also has active trigger points in his gluteus minimus muscle that reproduce his symptoms



Myofascial pain is not typically opioid responsive and can cause central sensitization if untreated

- spray and stretch
- trigger point injections
- dry needling
- Acupuncture
- Gunn technique
- exercise
- Yoga
- postural corrections



- untreated myofascial pain can lead to generalized chronic pain due to central sensitization
- Regional pain syndromes can become generalized

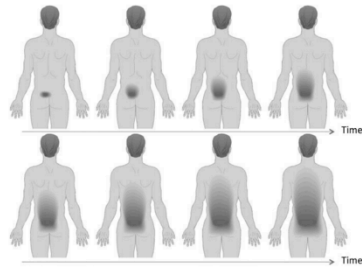


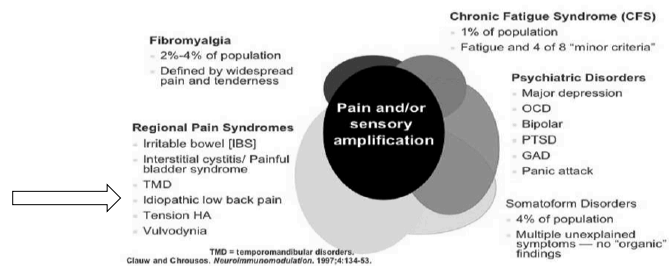
Figure 3 If a pain patient with an initial musculoskeletal pain problem is followed over years and if the problem is not resolved the pain starts to spread outside the origin of pain due to development of central sensitization. The pain will gradually spread as illustrated on this sketch and the spread can often not be explained by e.g. disease progression.

Understanding Central Sensitization

The Journal of Pain, Vol 10, No 9 (September), 2009: pp 895-926

- When neurons in the dorsal horn of the spinal cord develop central sensitization, they exhibit some or all the following:
 - development of or increases in spontaneous activity,
 - a reduction in the threshold for activation by peripheral stimuli,
 - increased responses to suprathreshold stimulation,
 - and an enlargement of their receptive fields

Central Sensitivity Syndromes



Smith H et al. *Pain Phys* 2011; 14: E217-E245

Recognizing Central Sensitization

	Description
Patient history	Reports of pain that spread beyond the initial area of injury
Primary/secondary brush allodynia	Painful response to lightly brushing the skin inside the initial area of injury (primary) or outside of the area of injury (secondary)
Temporal summation with wind up	Repeated painful stimuli, like a pinprick (usually tested as 1 per second for 10 seconds) results in an augmented pain response so that following repetitive pinpricks the intensity of the pain rating at the end is graded much higher than a single stimulus

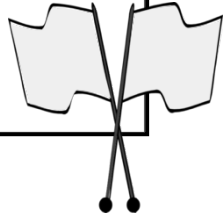
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Ralph - Physical exam

- reduced anterior flexion with pain
- can tiptoe, stand on his heels and squat
- reflexes normal
- no vertebral tenderness, but when you press on his lumbar paraspinal and right gluteal muscles he winces
- He is also tender over his posterior neck and shoulder girdle
- sensation grossly normal but seems to be generally more pain sensitive all over his back and neck and shoulder girdles
- he looks tired and discouraged

Screening “Yellow Flags” on Hx

Barriers / Yellow Flags (check if positive)	<input type="checkbox"/> No Barriers
For those with low back pain > 6 weeks or non-responsive to treatment:	
<input type="checkbox"/> Belief that pain and activity will cause physical harm	
<input type="checkbox"/> Excessive reliance on rest, time off work or dependency on others	
<input type="checkbox"/> Persistent low or negative moods, social withdrawal	
<input type="checkbox"/> Belief that passive treatment (i.e. modalities) is key to recovery	
<input type="checkbox"/> Problems at work, poor job satisfaction	
<input type="checkbox"/> Unsupportive / dysfunctional or dependent family relationships	
<input type="checkbox"/> Over exaggeration / catastrophizing of pain symptoms	



So, does he need an MRI? Referral to the surgeon?

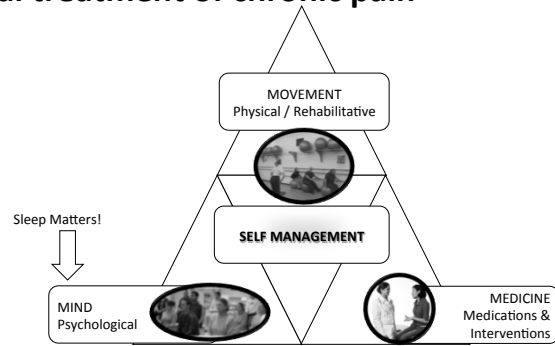
- physical exam = no red flags
- no evidence of neurological deficits
- seems to have myofascial pain and central sensitization
- main issues are pain, sleep, mood and worry about finances

Your specific diagnoses:

- Mechanical low back pain
 - back dominant
- Myofascial gluteal trigger points
- Indicators of central sensitization
- Pain-related mood disorder / insomnia



Ideal treatment of chronic pain



Questions?



Pain Resources for Primary Care Practitioners

- <http://www.painbc.ca/>
- www.backcarecanada.ca
- www.health.gov.sk.ca/back-pain
- www.topalbertadoes.org
- www.effectivepractice.org/lowbackpain
- <http://www.aafp.org/afp/2002/0215/p653.html>