CMEO
BriefCase

Employing Multi-Modal Pain Management in a Low-Resource Setting

Supported by an independent educational grant from Opioid Analgesic REMS Program Companies.

CME OUTFITTERS

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Learning Objective

Implement best practices to educate patients about their pain and treatment options to optimize safe and effective, multimodal treatment plans.

Primary Care Visit | Patient: Jackson H.

Story	• 54-year-old man with history of chronic low back pain, lumbar fusion (L3-L5) 2 years ago • Pain improved somewhat after surgery, but now significantly worsening over the past year • Notes from surgeon state patient did not attend follow-up appointments and did not attend follow-up with PT as scheduled; patient reports transportation issues at that time • Reports loss of job and primary insurance since surgery; current income from disability benefits • Reports he is recently divorced and feels depressed overall
Current Symptoms	• Complains of burning, sharp pain in lower back located at and below belt line with numbness and pain radiating to right leg • Pain is worse with walking; difficulty with daily activities like getting the mail and going to the store • Difficulty sleeping due to pain, unable to find a comfortable position
Relevant medications	• Hydrocodone/APAP 10/325 mg 1 tab 4x per day – does not like taking b/c it makes him feel sick/nauseous • Gabapentin 300 mg bid, prescribed but *not* taking • High dose ASA 845mg + caffeine 65mg extra strength pain relief powder packets, 4-6 packets per day
Interventions	• L3-L5 lumbar fusion 2 years ago
Physical therapy	• Attended 3 PT sessions post-op after lumbar fusion, none since • Reports difficulty with daily activities and simple tasks such as getting the mail and going to the store
Tests	• No imaging post surgery

APAP = N-acetyl-para-aminophenol or acetaminophen; ASA = acetylsalicylic acid; b/c = because; L3-L5 = third lumbar vertebra to fifth lumbar vertebra; mg = milligram; PT = physical therapy; tab = tablet.

Patient Case Continued: Jackson H.

Additional History and Physical Examination

- Social history: smokes 1.5 ppd (40 pack year history) recently divorced
- Exam
  - General**:** alert, well nourished male, strong smell of cigarette smoke and yellowing of fingernails noted; surgical incision appears well healed
  - Palpation: pain on palpation of low back bilaterally
  - Lower extremities: evident loss of muscle mass bilaterally to calves and quads, numbness, tingling and weakness radiating from the back near the site of the surgical incision to the right leg and foot; normal reflexes bilaterally
  - Mobility: limited range of motion to lumbar spine, positive straight leg raise on right side, slightly decreased knee extension on right side (unsure if limited by pain or weakness), normal reflexes; antalgic gait noted

ppd = packs per day

Functional Status Assessment

Tennessee Functional Status Questionnaire (TFSQ)

5 Question Assessment

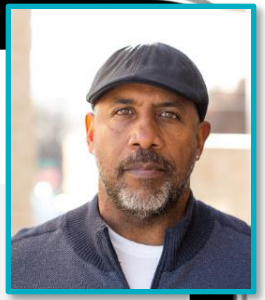
1. Functional Performance
2. Functional Capacity
3. Change in Activity
4. Pain Affecting Function
5. Recent Acute Care (ER/Hospital/Surgery)

Columns of Activities, Grouped by Metabolic Equivalents (METs) (for TFSQ Questions 1 and 2)

A (< 3 METs)	B (3 to < 4 METs)	C (4 to < 5 METs)	D (5 to < 6 METs)	E (≥ 6 METs)
Self-care – shower/wash, dress, use bathroom, eat	Activities in column A *and* at least 1 activity below:	Activities in column B *and* at least 1 activity below:	Activities in column C *and* at least 1 activity below:	Activities in column D *and* at least 1 activity below:
Shop at store, make food	Child care – lift a child	Elder care, care for disabled adult	Walk/run – play with children – vigorous only active periods	Move furniture, household items, carry boxes
Walk around house	Sweep/vacuum/clean inside house	Sweep outside house, sidewalk, or garage	Carry 1-15 pound load upstairs	Walk 3.5 miles very fast uphill
Sit at computer	Walk the dog/walk on flat firm surface	Push a wheelchair/walk fast while holding less than 25 pounds	Walk fast on a flat surface (4 mph) (walk a mile in 15 minutes)	Jog, singles tennis, basketball game, hard workout (high impact aerobics)
Ride mower, water grass	Trim shrubs or trees, use leaf blower	Push a power mower, rake lawn, play golf (walk and pull clubs	Softball or baseball; tennis, doubles; health club/gym workout	

Vanterpool SG, et.al. *J Am Board Fam Medicine*. 2023;36(1):4-14.

Functional Status (TFSQ) | Patient: Jackson H.



TFSQ #1 Functional Performance	• What do you **usually** do in a day? - Answer: Column A = < 3 METs
TFSQ #2 Functional Capacity	• What **can** you do on your **best** day? – Answer: Column B = 3 to < 4 METs
TFSQ #3 Change in activity	• In the last **60 days**, has your usual activity level **changed**? – Answer: LESS active
TFSQ #4 Pain affecting function	• In the last **60 days**, have you had **PAIN** that affects your activity level – Answer: YES
TFSQ #5 Acute Care	• In the **last 60** days, have you gone ot the **Emergency Room./Hospital** or had a **surgery**? – Answer: NO

Vanterpool SG, et.al. *J Am Board Fam Medicine*. 2023;36(1):4-14.

Failed Back Surgery Syndrome (FBSS)

Lumbar spinal pain of unknown origin *persisting* despite surgical intervention **or** *appearing* after surgical intervention in the same topographical location

Preoperative risk factors

- Psychiatric comorbidities
- Poor psychosocial well-being
- Obesity
- Smoking
- Litigation/workers compensation claim
- History of prior back surgeries

Postoperative factors leading to FBSS

- Progression of degenerative changes
- Transition syndrome (load distributed to spinal segments adjacent to surgical section)
- Altered biomechanics leading to joint injury, muscular hypertrophy, muscular atrophy or spasm

Baber Z, et al. *J Pain Res.* 2016;9:979-987.

What is Targeted Pain Treatment?

ACCURATE DIAGNOSIS
of the true **CAUSE(S)** of pain is the most critical component of Targeted Pain Treatment

PAIN is a **SYMPTOM** of an underlying condition


Physiologic


Anatomic


Functional


Psychosocial

Multiple causes of pain can be present at the same time

TARGETED TREATMENT
of the **CAUSE(S)** of pain treats the pain source, not the score

Use a "Multimodal" approach also known as: M.I.P.S. to treat all causes of pain

MEDICATIONS
Target the physiologic source of pain

INTERVENTIONS
Injections or procedures. Target the anatomic source of the pain

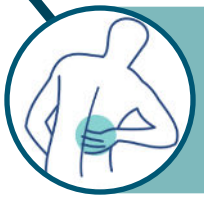
PHYSICAL THERAPY
Targets the functional limitations caused by pain

PSYCHOSOCIAL THERAPY
Targets the psychosocial comorbidity associated with the pain

Vanterpool SG, et al. *Targeted Pain Treatment Toolkit.* The University of Tennessee Graduate School of Medicine Website. 2023. https://gsm.utmck.edu/cme/courses/toolkit/main.cfm.

CME OUTFITTERS

Examining Potential Causes of Pain



Axial vs neuropathic pain

Review for similarities and differences of prior and current pain

Red flag symptoms: bowel or bladder symptoms, new/progressive neurologic deficit, signs of infection, weight loss, other symptoms of malignancy

Patient Assessment: Findings

Physiologic	• Muscular pain • Neuropathic pain
Anatomic	• Likely nerve irritation right side L4/L5- imaging needed for confirmation
Functional	• Pain worse with walking, difficulty with simple daily activities (getting mail, going to the store) • Limited range of motion in lower back • Abnormal gait
Psychosocial	• Smoking • Loss of job • Depressed • Divorced recently

Audience Response

Which of the following is a potential barrier to achieving optimal outcomes care based on the patient's history?

A. Unwillingness to utilize medication to treat pain
B. Lack transportation for in-person care
C. The need for additional surgical intervention
D. I don't know

Treatment Goals

- Avoid use of opioids the long-term management of lower back pain
- Recommend pharmacologic and non-pharmacologic treatment options as part of multimodal treatment plans for low back pain

SMART Goals

Specific, Measurable, Attainable, Relevant, Timely

- Increase functional performance from column A (< 3 METs) to Column B (3 to less than 4 METs) within the next 60 days

Comprehensive Treatment Plan

Medications	• Antispasmodic medication prn; resume regular Gabapentin • Ibuprofen 800 mg TID prn • No further hydrocodone/APAP • Discontinue ASA + caffeine powder packs - risk of GI ulceration
Interventions	• Order MRI of lumbar spine • Plan for minimally invasive interventional procedure(s) to treat back pain (referral to specialist from PCP office) • Must hold ASA powder packets for at least 7 days prior to interventional procedure
Physical Therapy	• Physical therapy: review home or in-person options for PT • Walk to the mailbox and back 3x per day
Psychosocial Treatment	• Initiate smoking cessation treatment planning • Refer for psychiatric support – in-person or via telemedicine

GI = gastrointestinal; TID = 3 times a day; MRI = magnetic resonance imaging; PCP = primary care provider; prn = as needed.

CMEO BriefCase 2

Personalizing Pain Care: Use of Opioid Risk Assessment Tools in Pain Management.

www.CMEOutfitters.com/rx4pain

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Opioid Education Hub

A robust hub of patient education and resources for your patients to learn more about pain management

https://www.cmeoutfitters.com/rx4pain/

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