



CIAO Time Presents:

Chronic Pain

The Center for Innovation in Academic Detailing on Opioids
San Francisco Department of Public Health

Agenda

1. Introductions
2. **Case Study:** Chronic low back pain
3. **Activity:** Mock academic detailing visit on chronic pain
4. Questions & Answers

Please submit
questions in
the Chat!



Our Team



Phillip Coffin
MD, MIA, FACP, FIDSA
Medical Director
he/him/his



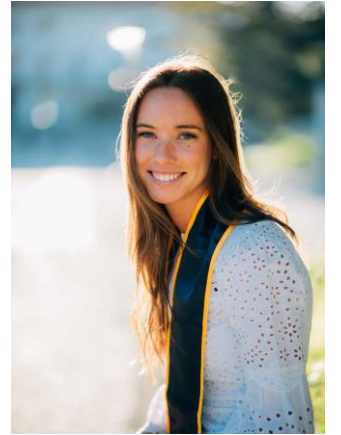
Brian Wylie
OTD, MPH
Program Director
he/him/his



Rebecca Martinez
MS, RN FNP-C
Clinician Trainer
she/her/hers



Bunny Taylor,
DNP, PHN, FNP-C
Clinician Trainer
they/them



Claire Schutz
Research Program
Assistant
she/her/hers

The Center for Innovation in Academic Detailing on Opioids



Our vision: We aim to decrease opioid-related morbidity and mortality by promoting balanced approaches to opioid management.

Our mission: We collaborate with healthcare providers to improve opioid and chronic pain-related care through innovative training and technical assistance services.

Today's Guest Speaker



Antje Barreveld
MD

Assistant Professor of Anesthesiology at Tufts University School of Medicine, Medical Director of Pain Management Services, co-Founder of the Substance Use Services, and Anesthesiologist at Newton-Wellesley Hospital

Chronic Pain



Case Study: Introduction



The patient:

Jack is a 57 year old male construction worker with long history of chronic low back pain occasionally radiating into his left leg and foot.

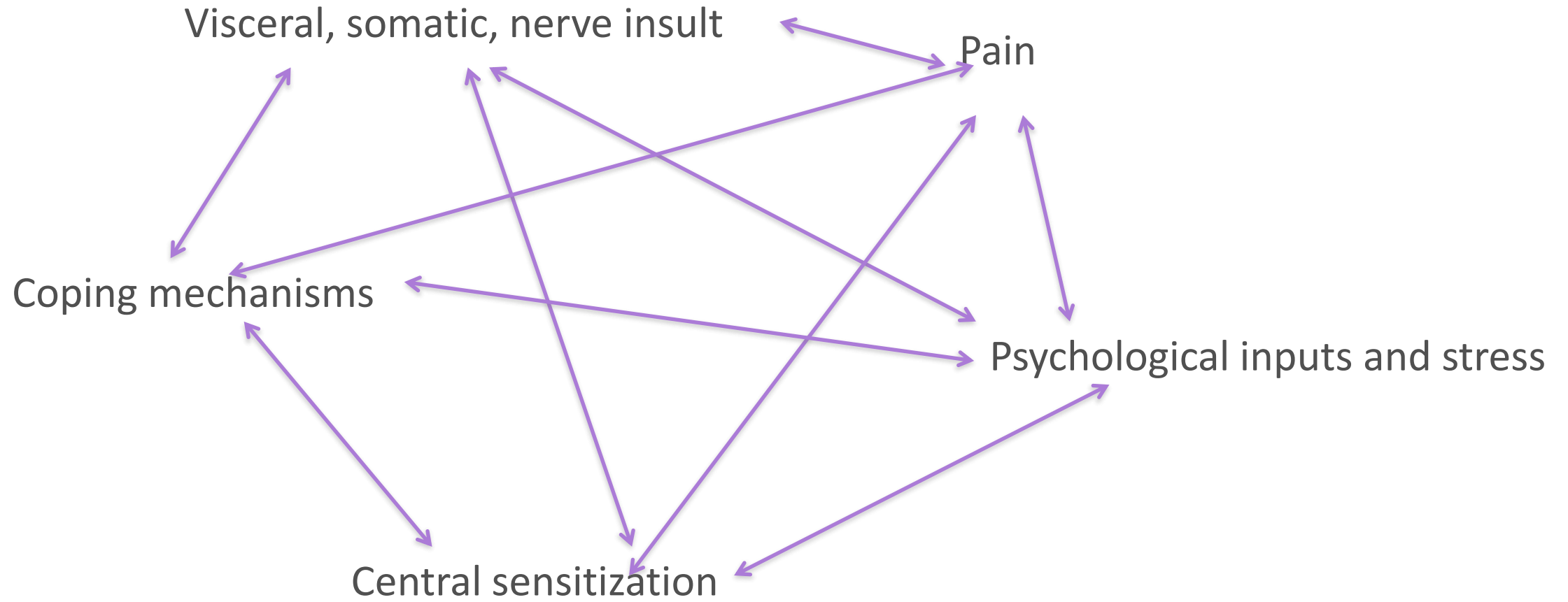
- Uses oxycodone as needed to help him be able to work when his pain is high, prescribed by his PCP.
- He feels he needs more regular opioid prescriptions so he can function.

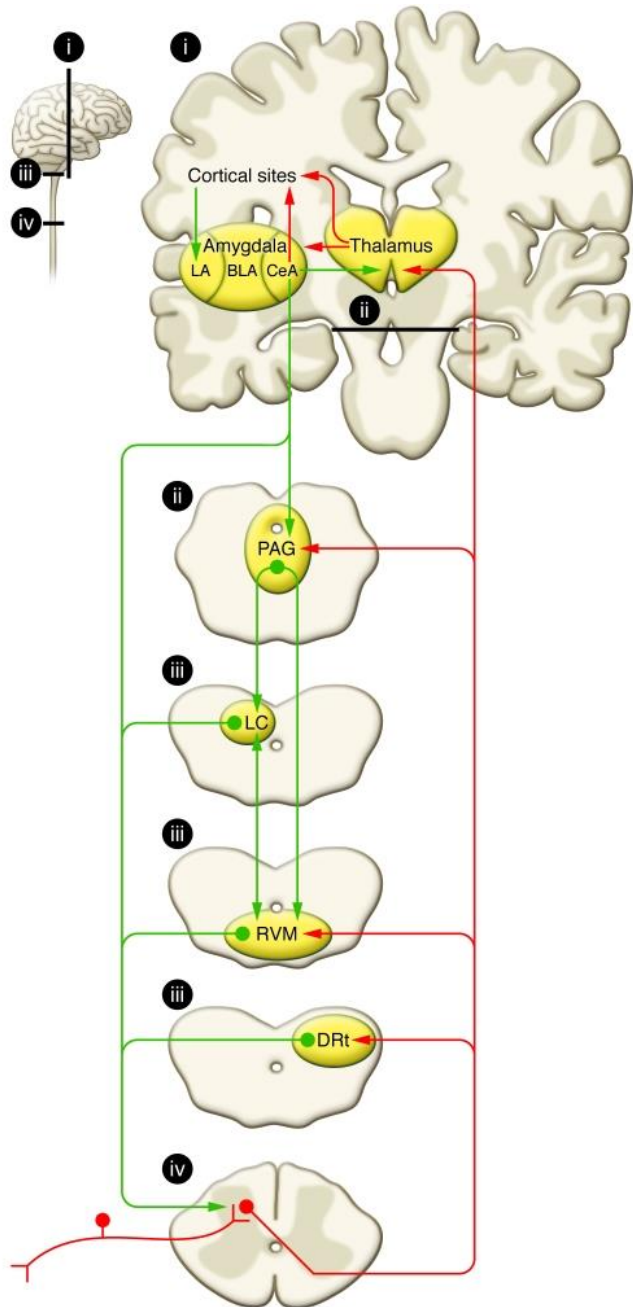
How can we advise him on how to best manage his chronic pain?

What is pain?

- The International Association for the Study of Pain (IASP) defines pain as: “... an unpleasant sensory and emotional experience associated with actual or potential tissue damage ...”
- A completely **subjective experience**. The consequence of the filtering, modulating and distorting of afferent nerve activity through the affective and cognitive processes unique to each individual.

Pain is Complex!

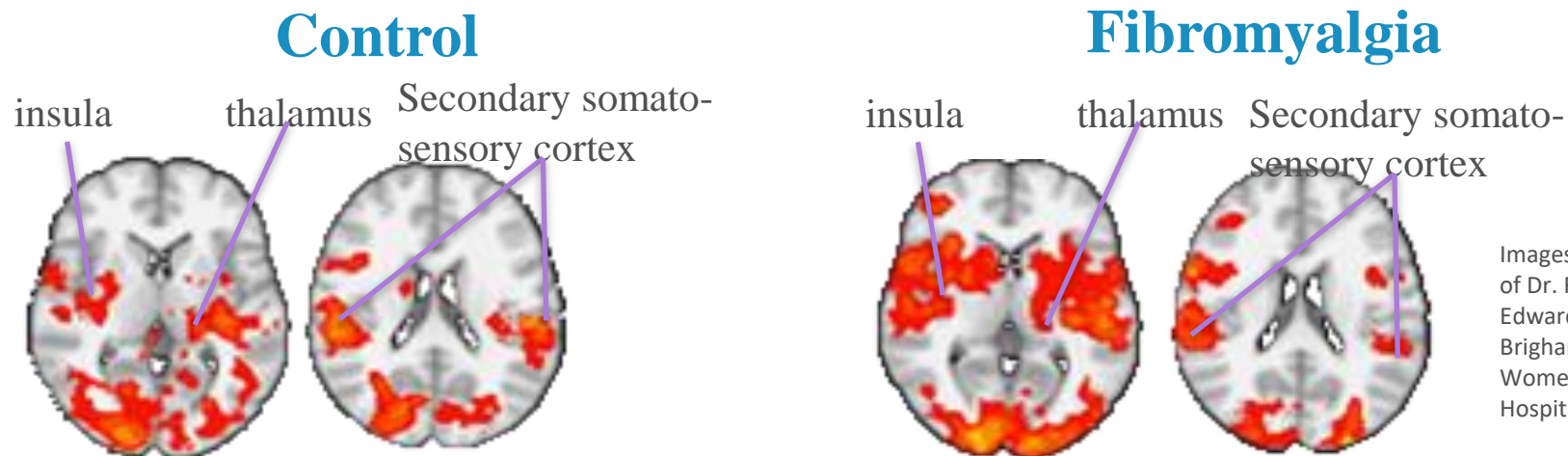




Pain Transmission—
 ascending and descending
 pathways → targets for
 pharmacologic and non-
 pharmacologic treatments

“Pain is In Your Head”

- Pain IS in the brain.
- Nociceptive input leads to increased activity in both the somatosensory and affective areas of the brain.
- A brain with chronic pain fires differently than a brain without pain.
- fMRI studies have shown that analgesics and suggestions of analgesia decrease activity in these same areas.



Images courtesy of Dr. Robert Edwards, Brigham and Women's Hospital

Effect of Chronic Pain on the Brain

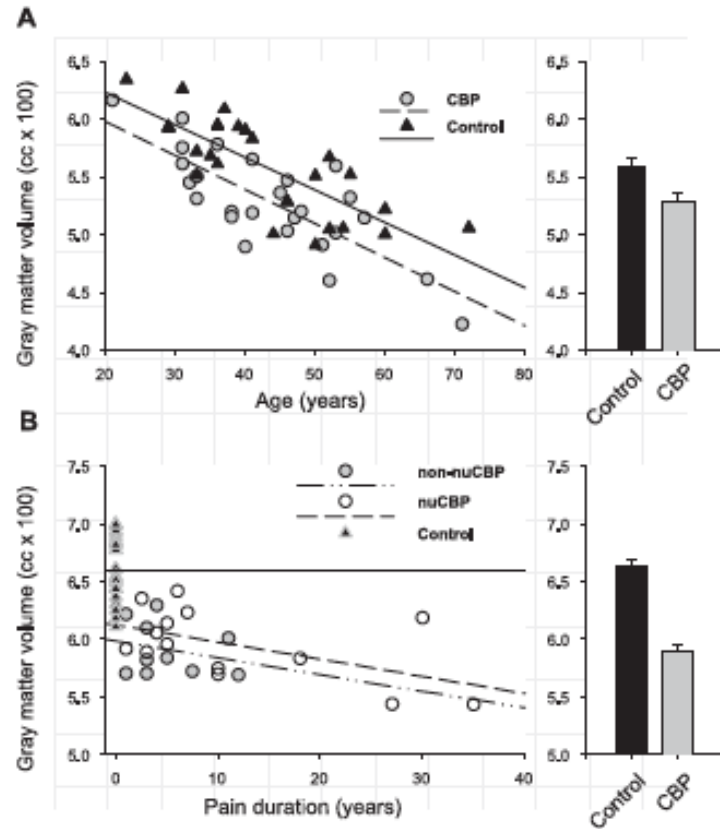


Figure 1. Decreased whole-brain cortical gray matter volume in CBP subjects. Skull-normalized neocortical gray matter volumes are shown for CBP subjects and matched control subjects. *A*, Gray matter volumes as a function of age. The difference in intercepts corresponds to an average decrease of 30 cm^3 in gray matter volume in CBP compared with the normal subjects. *B*, Gray matter volumes as a function of pain duration, after correcting for age and gender. Individual control subjects are shown at pain duration = 0. nuCBP and non-nuCBP CBP patient data are presented separately. The horizontal line is the mean volume for controls. Individual whole-brain gray matter volumes in CBP subjects are all below the mean volume for controls. Group-averaged gray matter volumes (mean \pm SEM) are shown in the right bar graph, before (top) and after (bottom) correcting for age and gender. Lines are best linear fits for each group.

Chronic pain leads to statistically significant decreased grey matter density – reversible when pain is treated!

Why is knowing how to manage pain so important?

- PAIN IS EVERYWHERE

“Effective pain management is a moral imperative, a professional responsibility, and the duty of people in the healing professions.”

- 1 in 5 Adults experience chronic pain²
- Many healthcare providers feel underprepared to manage pain
- Education about safe pain management practices will lead to effective pain control and positive outcomes

¹Institute of Medicine Report 2011, Relieving Pain in America

²Yong RJ, Mullins PM, Bhattacharyya N. Prevalence of chronic pain among adults in the United States. Pain. 2021 Apr

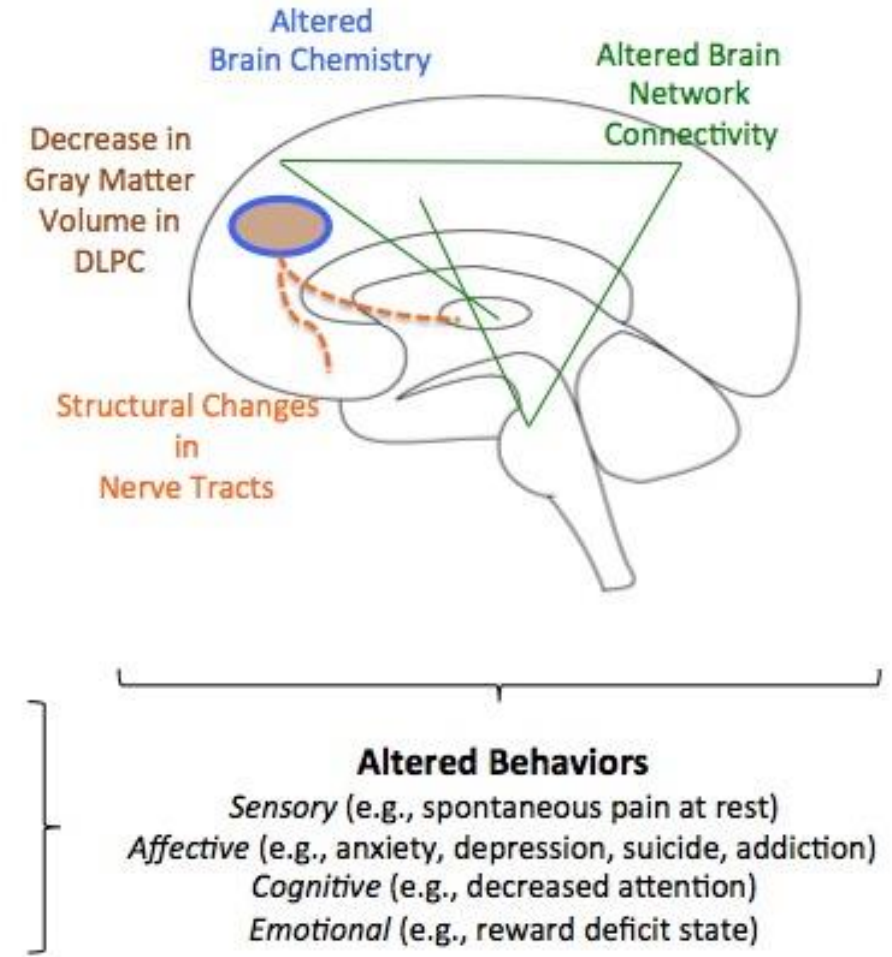
What does pain do to the individual? How are we supposed to best treat pain?

- Pain exerts widespread physiologic, cognitive, emotional, interpersonal and economic effects on the individual
- More severe acute pain can lead to chronic pain
- Multimodal pain management strategies are paramount
- Opioids can be prescribed safely for chronic non-cancer pain in certain circumstances
 - Chronic pain and addiction are not synonymous
 - But realities of the “opioid crisis” cannot be ignored

Normal Brain



Chronic Pain Brain



Case Study: Patient History



Other important patient history:

- No other relevant medical or psychiatric history.
- No personal or family history of substance use disorder.
- No risks factors for opioid misuse identified, screening for opioid use disorder negative.

First Poll



Question

Answer:

Opioids cannot safely be used for managing chronic pain.

Pain Care Barrier: Provider Lack of Confidence and Knowledge

- 2011 survey: less than 4% of North American medical schools had an integrated pain management course¹
- Lack of knowledge and confidence is further impacted by fear of addiction and medication misuse (and DEA regulatory fears?)...

¹Murinson et al, J Pain 2011

Additional Pain Care Barriers

- Provider and societal stigma and bias (pain = addiction?)
- Racial and ethnic disparities in pain treatment (especially back pain, abdominal pain, migraine)
- Racist myths: “Black people’s nerve endings are less sensitive than white people’s.” (418 UVA medical students and residents, 2016)
- Social inequities
- Geographic constraints and lack of access to multidisciplinary care
- Insurance constraints (“structural iatrogenesis”)

- Heward J et al. Coverage of non-pharmacologic treatments for low back pain among US public and private insurers. *JAMA Network Open*. 2018;1(6):1-14.

- De Ruddere L, Craig KD. Understanding stigma and chronic pain: a-state-of-the-art review. *Pain*. 2016 Aug;157(8):1607-10.

- <https://www.aamc.org/news-insights/how-we-fail-black-patients-pain>

- Hoffman KM et al. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *PNAS* 2016;113(16):4296-4301.

- Ly D. Racial and Ethnic Disparities in the Evaluation and Management of Pain in the Outpatient Setting, 2006-2015. *Pain Medicine* 2019.

- Coffa D, Stonington S. Structural iatrogenesis – A 43-year-old man with “opioid misuse.” *NEJM* 2019

Pendulum Swing in Pain Management

Some People Still Need Opioids

The crackdown on pain medication prescribing is intended to help the addiction crisis—but it's leaving chronic pain patients in untenable situations.

By Stefan Kertesz and Sally Satel



The pendulum has swung too far in the other direction.

Ingram Publishing/Thinkstock



TOBY TALBOT/ASSOCIATED PRESS/FILE

Doctors are being more careful with opioid prescriptions as addiction and its effects get more recognition.

By Felice J. Freyer | GLOBE STAFF | JANUARY 03, 2017

“Doctors face myriad pressures as they struggle to treat addiction and chronic pain, two complex conditions in which most physicians receive little training. Those responding to the survey gave two main reasons for cutting back: the risks and hassles involved in prescribing opioids, and a better understanding of the drugs’ hazards.”

The results also suggest a substantial minority of physicians may believe the pendulum has swung too far, depriving pain patients of needed relief.”

Pain Care Crisis

- Understanding pain and decoding pain management strategies is critical → key to compassionate, safe pain care
- Individualized and equitable pain management is essential

Case Study: Continued



How does the patient feel about opioids?

- Jack tells you the oxycodone helps him to be able to work, *if he cannot work he cannot support his family.*
- Also reports difficulty sleeping due to back pain.
- He understands the risks of opioids, he is not concerned.

How will you assess his pain and advise him next?

Second Poll



Question

Answer:

Current Opioid Misuse Measure (COMM)

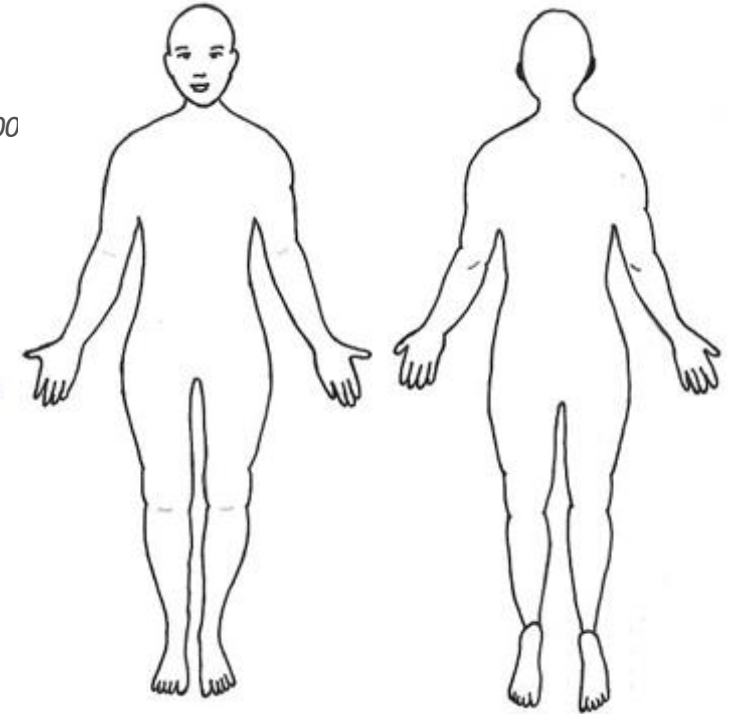


Pain Assessment

- **O - Onset:** When did the pain start? What was happening at that time?
- **P - Palliative and Provocative factors:** What makes the pain better? Worse? (Include specific activities, positions or treatments.)
- **Q - Quality:** Describe the pain. Is it burning, sharp, shooting, aching, throbbing, etc.?
- **R - Region and Radiation:** Where is the pain? Does it spread to other areas?
- **S - Severity:** How bad is the pain? Function? Quality of Life?
- **T - Timing:** When does the pain occur? Has it changed since onset? If so, how?

Pain Assessment Tools

- Encourage patient's *pain narrative* (Charron R, JAMA, 200)
- Numeric Rating Scale
- Pain Faces
- Pain Diagrams
- PEG-3
- Verbal Descriptors (mild, moderate, severe)
- Functional Scales, PROMIS Pain Interference and Disability Scales, Pain Disability Index (Pollard CA Percent Mot Skills. 1984).
- Observation, Vital Signs



Case Study: Continued



Findings during today's visit:

- Physical exam:
 - pain with lumbar range of motion and palpation of the paraspinal muscles
 - no other notable findings.
- Pain appears to be a combination of muscle pain as well as spinal joint pain/arthritis (facet arthropathy or spondylosis).

What are the best next steps around pain management options for Jack?

Third Poll

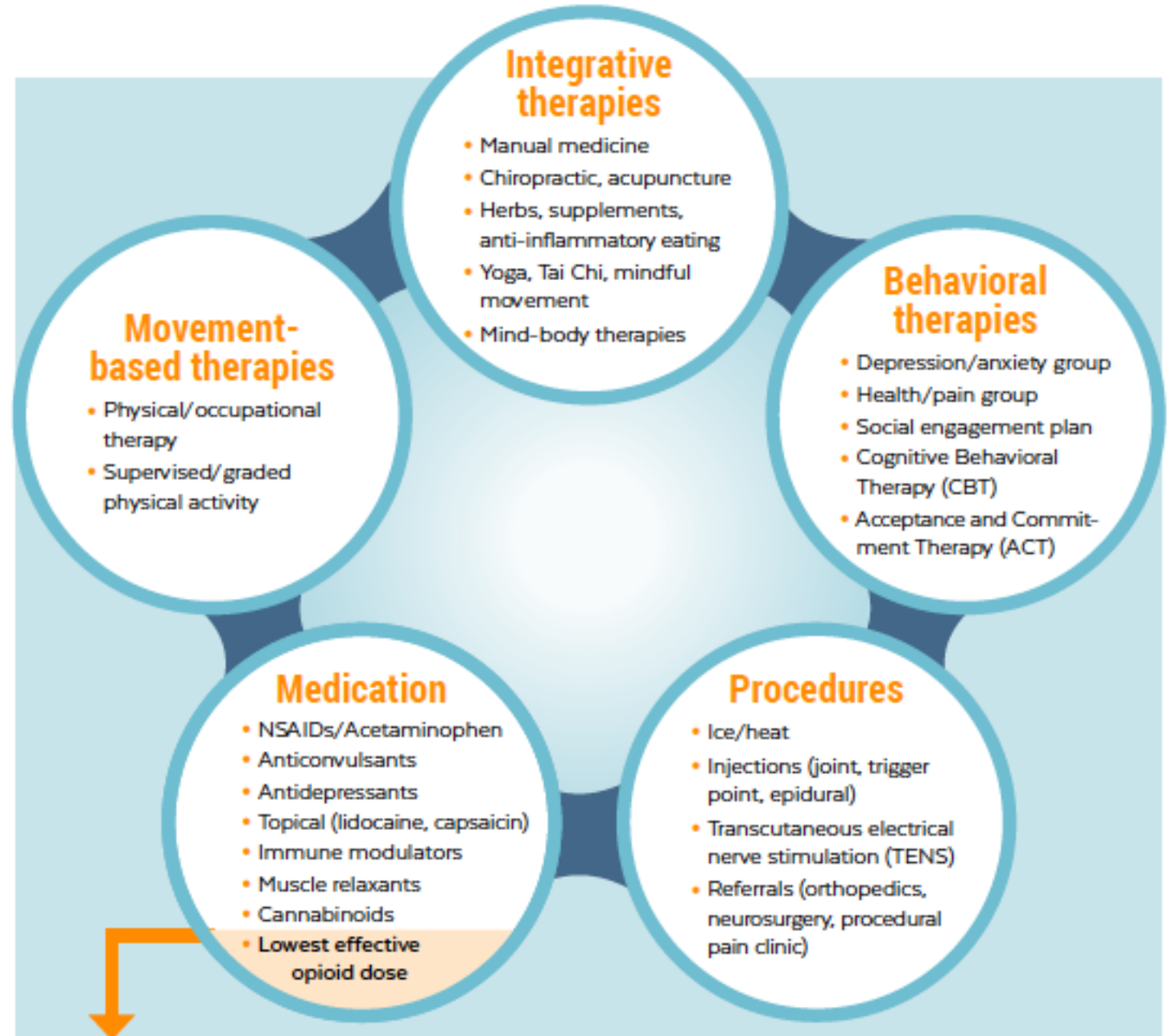


Question

Answer:

Collaborate with the patient on a multimodal care plan.

Managing Chronic Non-Cancer Pain: The Pain Wheel



Non-Pharmacologic Approaches to Pain

Skelly AC, Chou R, Dettori JR, Turner JA, Friedly JL, Rundell SD, Fu R, Brodt ED, Wasson N, Winter C, Ferguson AJR. Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review. *Comparative Effectiveness Review No. 209*. AHRQ Publication No 18-EHC013-EF. Rockville, MD: Agency for Healthcare Research and Quality; June 2018. doi.org/10.23970/AHRQEPCCER209

Chronic tension headache:

- Spinal manipulation

Chronic neck pain:

- Exercise
- Low-level laser therapy
- Alexander Technique
- Acupuncture

Chronic low back pain:

- Exercise
- Psychological therapies, primarily cognitive behavioral therapy (CBT)
- Spinal manipulation
- Low-level laser therapy
- Massage
- Mindfulness-based stress reduction
- Yoga
- Acupuncture
- Multidisciplinary rehabilitation (MDR)

Fibromyalgia:

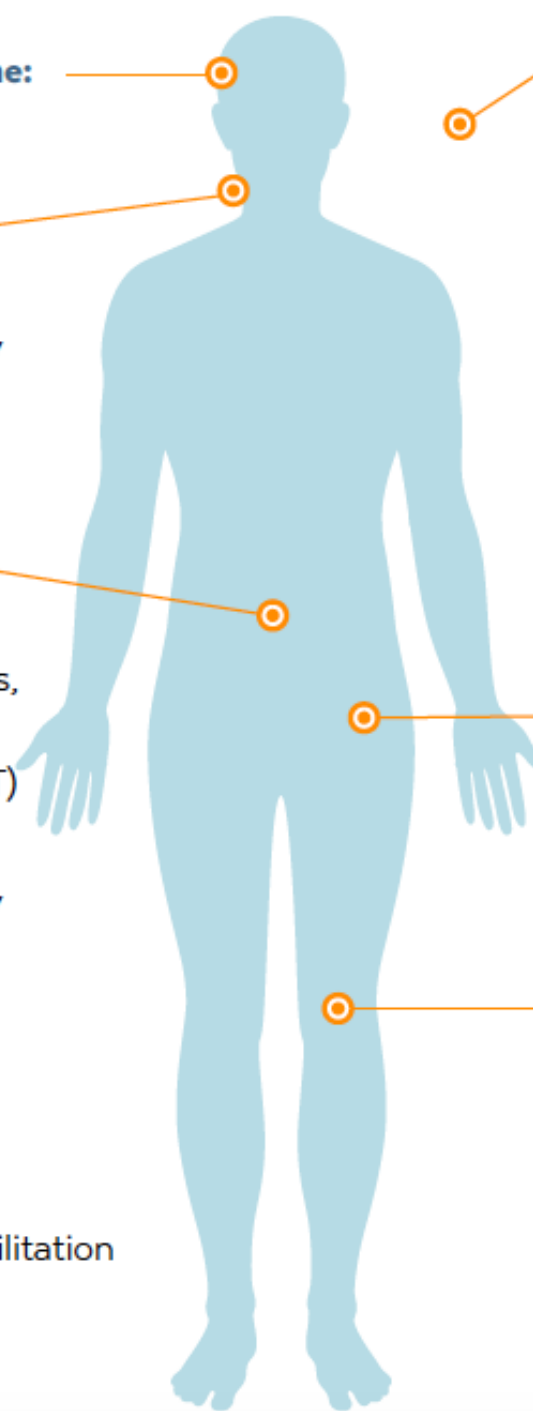
- Exercise
- CBT
- Myofascial release massage
- Tai chi
- Qigong
- Acupuncture
- Monopolar Dialectic Radiofrequency

Hip osteoarthritis:

- Exercise
- Manual therapies

Knee osteoarthritis:

- Exercise
- Ultrasound



Use a systematic approach to initiating pharmacologic therapy for pain:

1. Record history and physical, pain description, function/social assessment.
2. Determine mechanism of pain.
3. Consider non-pharmacologic options.
4. Consider pharmacologic options that may help.
5. Reassess response at regular intervals and modify treatment accordingly.

When *should* a provider consider opioids for chronic conditions?

- When other therapies are contraindicated
- When other therapy trials were implemented and unsuccessful
- After a full assessment and discussion of risks and benefits

Types of Pain

Mechanism	Characteristics	Examples	Treatment Options
<u>SOMATIC</u> from musculoskeletal or cutaneous sources	well localized; constant; sharp, stabbing	laceration, fracture, burn, abrasion, localized infection or inflammation, muscle spasm	heat/cold, acetaminophen, NSAIDs, opioids, muscle relaxants, local anesthetics (topical or infiltrate)
<u>VISCERAL</u> from thoracic, pelvic, or abdominal organs	not well localized; constant or intermittent; ache, cramp or pressure, can be sharp	colic or obstruction (GI or renal), sickle cell crisis, organ infection or inflammation	NSAIDs, opioids, local anesthetics (nerve-blocks)
<u>NEUROPATHIC</u> from damage to the somatosensory nervous system	localized or radiating, can also be diffuse; burning, tingling, electric shock, lancinating	trigeminal, post-herpetic, post-amputation, peripheral neuropathy, nerve infiltration	anticonvulsants, antidepressants, NMDA antagonists, neural or neuraxial blockade

Medication Class	Example Medications	Example Conditions	Contraindications/Notes
Acetaminophen	Tylenol	Tension headache, osteoarthritis, etc.	Caution: liver, kidney disease
Non-steroidal Anti-inflammatory Drugs (NSAIDs)	Ibuprofen, Naproxen Aspirin Topical diclofenac 1%	Osteoarthritis, rheumatoid arthritis, gout, migraine, menorrhagia, etc.	Caution: kidney disease, GI ulcers / bleeding
Anticonvulsants	Gabapentin, Pregabalin Topiramate, Carbamazepine	Neuropathic pain, post-herpetic neuralgia, trigeminal neuralgia, migraine, fibromyalgia, etc.	Withdrawal if stopped abruptly May potentiate opioid “high” May need to monitor level Caution: kidney disease, elderly
Antidepressants	Tricyclic antidepressants Selective norepinephrine reuptake inhibitors/SNRIs Selective serotonin reuptake inhibitors/SSRIs	Neuropathic pain, headache, post-herpetic neuralgia, fibromyalgia, chronic musculoskeletal pain, etc.	Withdrawal if stopped abruptly Caution: liver disease, alcohol use, elderly
Topical anesthetics	Lidocaine 2-5%	Neuropathic pain, post-herpetic neuralgia, etc.	
Muscle relaxants	Baclofen Cyclobenzaprine Tizanidine	Muscle spasm, spasticity, etc.	Can be sedating
Corticosteroids	Methylprednisolone dose pack (taper over 5-7 days)	Acute, inflammatory pain	Avoid chronic steroid use Caution: NSAIDs or GI ulcers

Case Study: Continued



- You discuss with Jack his pain care plan and focus on all treatment areas emphasizing non-opioid options to start:
 - Physical therapy and preventative techniques to support his labor-intensive job
 - Discuss occasional opioid for severe pain
 - Non-opioid medication options: topicals, anti-inflammatories, vitamin D
 - Adjunctive therapies: massage, TENS
 - Consider referral for injection therapies
 - Sleep hygiene

Effective Pain Management: Patient-focused Approach

- Ensure a comprehensive initial assessment and an interdisciplinary, collaborative plan of care including patient and family input. Patient engagement is needed so that their preferences and values are reflected.
- Evidenced-based pain management approaches and goals (based on patient-defined outcomes) should be tailored to the needs, desires, and circumstances of individual patients.

Pain Management Plan

- Use a comprehensive analgesic plan that addresses the multidimensional aspects of pain
- A multimodal, team-based approach for managing pain is always best!
 - Medications, non-opioid and opioid when appropriate
 - Behavioral strategies, e.g. cognitive behavioral therapy, meditation, mindfulness
 - Physical therapy, Exercise, Diet
 - Interventional procedures
 - Alternative therapies
 - And more!
- Individual responses vary greatly for analgesia and side effects of medications

Key Messages for Academic Detailing on Chronic Pain

- Maximize non-opioid approaches in chronic pain management.
- Collaborate with patients and team to establish a multimodal approach to pain.
- Monitor patients for improvement in function.
- Recognize that patients living with chronic pain live with stigma.
- Keep patients on opioids safe by prescribing naloxone and other opioid stewardship measures.

*Treating pain is rewarding
and should not be
intimidating!*





Mock Academic Detailing Visit

What to watch for...

Steps of a Visit

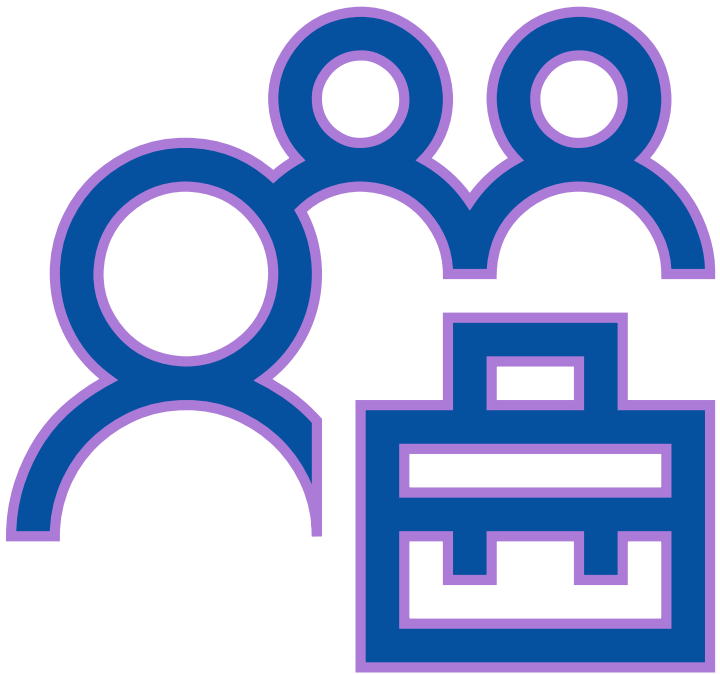
Introduction

Needs Assessment

Key Messages

Handling Objections

Summary & Closing



Academic Detailing Visit Demonstration



Substance Use Warmline

Free, Confidential Clinician-to-Clinician Consultation on Substance Use Evaluation and Management

855-300-3595 (M – F, 9am – 8pm EST), or nccc.ucsf.edu

Our consultants provide clinicians with guidance on a range of topics, including:

- Assessing and treating opioid, alcohol, and other substance use disorders
- When/how to initiate medications for opioid use disorder
- Toxicology testing: when to use it and what it means
- Identifying and managing withdrawal
- Approaches to adjust opioid-based pain regimens to reduce risk of misuse and harm
- Harm reduction and overdose prevention strategies
- Discuss useful communication and care strategies to support patients living with, or at risk for, substance use disorders
- Substance use in special populations

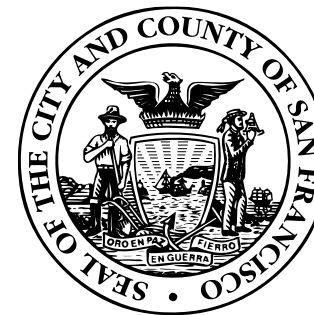
Our team includes expert physicians, pharmacists, and advanced practice nurses with considerable experience managing substance use disorder. *No protected health information is collected during our consultations.*

This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U1OHA30039 (AIDS Education and Training Centers National Clinician Consultation Center) in partnership with the HRSA HIV/AIDS Bureau (HAB) and Bureau of Primary Health Care (BPHC), awarded to the University of California, San Francisco

Thank you!



CENTER FOR INNOVATION
IN ACADEMIC DETAILING
ON OPIOIDS



SAN FRANCISCO DEPARTMENT
OF PUBLIC HEALTH



Information presented does not
reflect the opinion of CDPH