Chronic Pain Assessment: The Foundation of Treatment

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Disclosures

- Ferring Pharmaceuticals: Consultant and Speaker
- One Source Regulatory: Consultant
- Your Encore: Consultant
- Janssen Pharmaceuticals: Consultant

Learning Objectives

- Compare different pain rating scales
- Describe a comprehensive stepwise approach to the assessment and follow-up of patients with chronic pain
- Identify support tools available to the primary care clinician managing a patient with chronic pain

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Pain Control Still a Significant Problem in 2017

- Goal of medicine:
  - Relief of suffering (ACP, 1984)
- 100 million Americans
  - 56% suffered pain ≥5 years
    - 22% referred to pain specialist (DeLuca, 2001)
  - 28% without pain controlled (APS, 1999)
  - Cost: $635 billion (IOM, 2011)
  - $32,000 per chronic pain patient/year (PAINWeek Daily Dose, 2015)

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Pain Medicine and Opioids: A Short History

- Pain medicine—a new field
- 1960s
  - Drive to improve cancer pain patient treatment
    - Use of opioids was a focus
    - Cancer model transposed to noncancer
- Opioid focused model
  - Goal to relieve pain
    - Cancer model applied to noncancer patients
  - Quickly evident:
    - Opioids were not the panacea for pain
    - Significant side effects, eg, physical & social, etc

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Inadequate Preparation and Training

- Healthcare professionals receive nominal training
  - "…Available evidence indicates that pain management training is widely inadequate across all disciplines" (Fishman, 2013)
  - Few PCPs feel comfortable treating pain
    - Fewer feel comfortable using opioids (Upshur, 2006; O'Rouke, 2007)
    - Becoming worse as draconian legislation is enacted
  - Medical school (HCP school) has failed
    - Very few hours in pain and end of life
    - Very few hours in substance abuse, misuse, diversion, overdose deaths
    - Very few hours in use of opioids
    - Almost no hours in opioids side effects

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Definitions

- Pain
  - –"An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage." (IASP, 2011; Aydede, 2017)
- Acute pain
  - –<3-6 months
  - –Related to tissue damage: cuts, abrasions, fractures, sprains, surgeries
  - –Acute pain is "the normal, predicted physiologic response to an adverse chemical, thermal, or mechanical stimulus ... associated with surgery, trauma, or acute illness." (Carr, 1999)
  - –Physiologically important function

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Definitions: Chronic Pain

- "Chronic pain has a distinct pathologic basis, causing changes throughout the nervous system that often worsen over time. It has significant psychological and cognitive correlates and can constitute a serious, separate disease entity." (IOM, 2011)
  - –Determined cause with appropriate evaluation and assessment is usual
- Duration: >3-6 months
  - –Some definition schemas add "subacute"—3-6 months

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Chronic Pain (cont'd)

- Prevalence
  - "High prevalence of current pain (48.9%) and chronic pain (53.7%) were found in this community-based study. … Chronic pain showed clear associations with healthcare-seeking and occupational activity, indicating considerable socioeconomic costs." (Gerdle, 2004)
- Less about "chronic" and "acute" than specific diagnosis

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Neuropathic Pain

- "Pain caused by a lesion or disease of the somatosensory nervous system." (IASP, 2012)
  - Clinical description, not a diagnosis (Rowbotham, 2005)
  - "While this definition has been useful in distinguishing some characteristics of neuropathic and nociceptive types of pain, it lacks defined boundaries." (Treede, 2008)

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Patient Misperceptions

"A pitfall identified by the taskforce [APS] in early pain QI efforts was miscommunication to the public that identifying pain management as a patient right meant all pain could be completely prevented or eliminated."

(Gordon, 2005)

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Case Study

- Leona, 52 yo female patient presents with back pain
- How do you approach this patient?

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Case Study (cont'd)

- Leona 52 yo female with back pain
  - In H&P
    - History of head trauma, physical abuse and ? sexual abuse
    - Migraine headaches weekly and poorly controlled
    - Depression
    - Some anxiety
    - Using alcohol to help with pain, and her psychological state
    - Poor sleep
    - Increased weight
    - Daytime somnolence, snores loudly
    - Has seen multiple physicians and tried multiple medications
    - On physical you find dramatically diminished sensation in the feet and ankles
    - On physical you find blood pressure of 175/100

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Wrong Headed Thinking!

- ACP & APS
  - "Clinicians should conduct a focused history and physical examination … " (Chou, 2007)

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The Complexity of Chronic Pain

1) Medication side effects
2) Medical comorbidities
3) Other concomitant symptoms
4) Psychiatric/psychological comorbidities
5) Risk for medication abuse/ diversion
6) Number of chronic pain problems
7) Number of past surgeries
8) Tobacco usage
9) Head trauma history
10) Body mass index
11) Sleep disorders
12) Goal setting
13) Educational level/employment status
14) Current pharmacotherapy regimen
15) Coping skills and social support
16) Physical conditioning
17) Current pain intensity

Peppin, et., al., 2015

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Assessment Foundational

- Diagnoses
- Comorbid conditions
- Psychological condition
- Treatment plan
- Treatment success
- Patient trust and "buy-in"
  - –No measure for chronic or acute pain
    - The patient is your source of the presence, impact, and intensity of their pain
      - –Not carte blanch to assume exaggeration

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What Should the Assessment Include?

- Visual patient inspection—as they walk into the examination room:
  - –What is their demeanor, how do they interact, are they well groomed?
  - –"There is no more difficult art to acquire than the art of observation, and for some men it is quite as difficult to record an observation in brief and plain language."
    Sir William Osler (Bean, 1950)

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Assessment Should Include

- Patients with chronic pain do not have one pain complaint
  - –Focused and limited examination to the primary complaint is wrong headed
  - –Location is not a diagnosis
    - "Low back pain" or "neuropathic pain" are of little help
  - –Head to toe evaluation and assessment
    - Headaches
    - Neck pain
    - Numbness and tingling in the hands
    - Groin pain
    - Low back pain

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Assessment Should Include (cont'd)

- For each pain trigger
  - –Location
  - –Onset and initiating factors
  - –Intensity and pattern
  - –Pain quality
  - –Effect on QOL and function
  - –Better and worse
  - –Previous treatments
    - Including medication dose
    - Nonpharmacologic and interventions
    - Get old records

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Functional Assessment

- Goals
  - –Realistic functional and QOL goals
- Objective measure
  - –6 minute walk
- Physical therapy assessment
  - –A PT who understands chronic pain

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Physical Examination

- Full head to toe
  - –Differential should be already established in your mind
    - Physical examination helps define the diagnosis
- Can include full ROS as you do the PE
  - –Breast and genital examination only if pain exists there
- Patient should be in a gown!

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Physical Examination (cont'd)

- Things missed in the history can be found
- Comorbidities can be determined
  - –Heart murmurs, skin abnormalities, deformities, etc
- Sir William Osler:
  - –"One finger in the throat and one in the rectum makes a good diagnostician." (Huth, 2000)

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Psychological Assessment

- Evaluate for depression, anxiety, suicidal ideation, sexual abuse
- Screens
  - –Help place patients in risk category
  - –Patient Health Questionnaire (PHQ-9) (Thase, 2016; Moriarty, 2015)
    - USPSTF recommended, (Siu, 2016)
  - –Multiple scales:
    - Becks Depression Inventory
    - Hamilton Rating Scale
    - Zung Self-Rating Scale
    - Others

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Psychological Assessment: Warnings

- Look for psychological warning signs
  - –Suicidal ideation
  - –Anergia
  - –Anhedonia
  - –Anorexia
  - –Insomnia
  - –Lack of acceptance
  - –Poor goals
  - –Angered outbursts

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Catastrophizing

- "Collectively, pain catastrophizing is characterized by the tendency to magnify the threat value of pain stimulus and to feel helpless in the context of pain." (Quartana, 2009)
- Screening tool (Sullivan, 1995)
- Correlated with:
  - Adverse pain related outcomes
  - Poor treatment responses
  - Shapes emotional, functional, and physiological responses to pain
- Treatment, multidisciplinary pain centers (Barnoff, 2013)

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Chemical Coping

- "Middle ground between compliant medication use and addiction." (Kirsh, 2007)
  - Kirsh, et al, screening tool
  - Important distinction
  - "The use of opioids to cope with emotional distress, characterized by inappropriate and/or excessive opioid use." (Kwong, 2015)
  - Poor prognosticator for efficacy of treatment and reduction in pain (Delgado-Guay 2015)

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CAGE

- CAGE (Ewing, 1984)
  - Validated in numerous studies
    - A good, quick indicator of the need for further investigation
  - Have you ever felt you should Cut down on your drinking?
  - Have people Annoyed you by criticizing your drinking?
  - Have you ever felt bad or Guilty about your drinking?
  - Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover?
    (Eye Opener)
- CAGE-AID (Brown, 1995)
  - Adapted for drug abuse

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Kinesiophobia

- Common in SLE >65% (Baglan, 2015)
- "The fear of movement was the single strongest contributor to ankle disability" (Lentz, 2010)
- Impact on life
  - Job
  - Disability
  - Social support
  - Pain treatment and treatment efficacy

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Pain Rating Scales

- Numerical rating scales
  - –"Our results suggest that, in the measurement of cancer pain exacerbations, patients use NRS more appropriately than VRS and as such NRS should be preferred to VRS in this patient's population." (Brunelli 2010)
- Correlation between HCP and patients, poor! (van Dijk, 2012)

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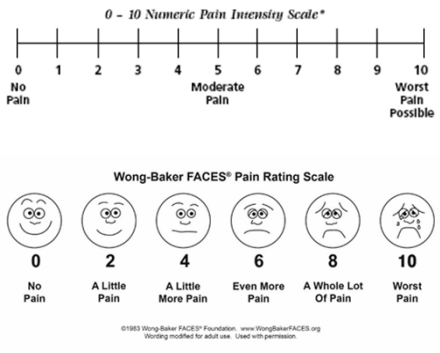
Pain Rating Scales (cont'd)



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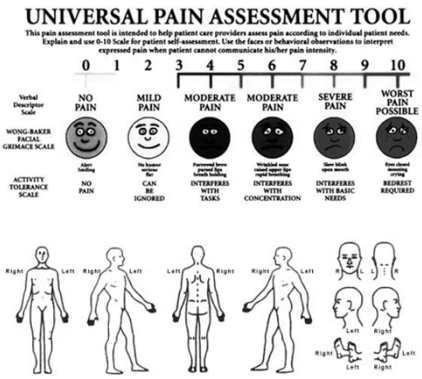
Pain Scales and Assessment



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What is Meaningful Pain Relief?

"Data from clinical trials suggest that a 33% to 50% decrease in pain intensity is meaningful from a patient's perspective and represents a reasonable standard of intervention efficacy."

(Gordon, 2005)

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Generalized Broader Assessments

- Battery for Health Improvement (BHI-2)
  - "Assessment of validity, physical symptoms, psychological, character, environment, and social factors that can impact response to normal course of treatment and recovery of patients being treated for pain and injury." (Pearson, 2015)
- SF-36
  - Over 4000 publications
  - Physical and mental health

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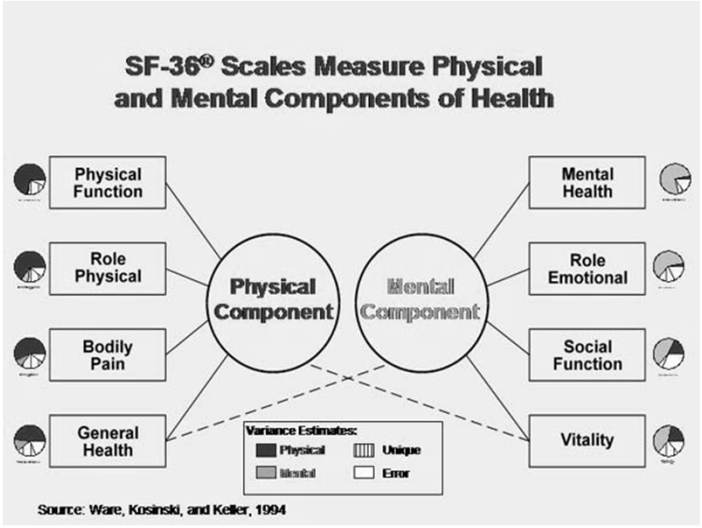
http://www.pearsonclinical.com/psychology/products/100000095/battery-for-health-improvement-2-bhi-2.html



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http://www.sf-36.org/tools/sf36.shtml, accessed March 12, 2016

Generalized Broader Assessments

- Brief Pain Inventory
  - –https://www.painedu.org/Downloads/NIPC/Brief_Pain_Inventory.pdf
- McGill Pain Questionnaire
- Just ask!
  - –"Are you at risk to yourself or others?"
  - –"Any history of physical or sexual abuse?"

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PEG

- PEG (Kean, 2016)
  - –Ultra-brief 3-item measure
  - –Derived from the BPI
  - –Validated
  - –**I**ncludes:
    - Severity item (average **pain**)
    - Interference items (**enjoyment** of life and **general** activity)
    - Same scales and scoring as the BPI
  - –Recommended by the CDC Guidelines (Dowell, 2016)

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Risk of Abuse, Misuse, Diversion, and Overdose Death

- Universal precautions (Gourlay, 2005)
- Risk screening tools (Passik & Kirsh, 2008)
  - –ORT—Opioid Risk Tool
  - –SOAAP—Screener and Opioid Assessment Measure for Patients with Chronic Pain
  - –SOAAP-R—Revised
  - –DIRE—Diagnosis, Intractability, Risk, Efficacy Tool
  - –SISAP—Screening Instrument for Substance Abuse Potential

 http://diginole.lib.fsu.edu/islandora/object/fsu%3A207738/datastream/PDF/view.

Assessment and Reassessments

"High-quality pain management includes appropriate assessment, including screening for the presence of pain, completion of a comprehensive initial assessment … and frequent reassessments of patient responses to treatment ..."

(Gordon, 2005)

Reassessment: Key to Treatment Efficacy

- Consistent reassessment is critical
  - Upfront time investment worth the effort
    - Shortens subsequent visits
  - Reassessment should include a history of treatment efficacy, goals, medication side effects, QOL, sleep
    - Address appropriate medication usage
    - Re-review medications, OTC, prescription, supplements
    - Other medical problems that may have surfaced
    - Readdress psychological health
    - Readdress functionality
    - Other …
    - Physical examination

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Diagnostics and Other Data

- Review old records
  - Order them from the specific physician and office
- Imaging and other studies
  - Only when it may change your diagnosis or treatment
- Laboratories
  - Vitamin D, hormonal studies (especially if on opioids, some AEDs)
  - TSH, B12 (folate), other labs if neuropathic symptoms present

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Opioid Side Effects

Opioid Induced Bowel Dysfunction

- Zerostomia
- Dental carries
- GERD
- Esophageal dysmotility/spastic paralysis
- Increased fluid absorption
- Increased segmental contractions without peristalsis
- Increased rectal sphincter tone
- Increased rectal vault volume
- Nausea and vomiting
- Anorexia
- GI pain/bloating
- OIC

- Urinary retention
- Endocrine abnormalities
- Confusion/cognitive/sedation changes
- Emotional changes
- Pruritus
- Cardiac/EKG changes
- Respiratory depression/CSA/OSA/disordered breathing
- Myoclonus/tremor
- Neonatal abstinence syndrome
- Opioid induced hyperalgesia
- Effects not predictable 2nd genetic polymorphisms of opioid receptors

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Assessment: A Practical Approach

- Overview
  - Full history
    - All pain triggers
  - Allergies, family history, immunization history, social history, legal history
  - Medication history
    - Current OTC, supplements, medications
    - Previous OTC, supplements, medications
    - Including Ibuprofen, Tylenol, etc ..
  - Full treatment history for each pain trigger
  - ROS: full
  - Physical examination: full

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Assessment: A Practical Approach (cont'd)

- Standardized forms
  - EMR
  - Should establish quick, albeit not flippant, approach
    - Check off those things that are positive, negatives are automatically populated
  - Include risks and benefits to commonly prescribed medications/treatments
- Bring patient back frequently
- Patients should understand they need to be part of the solution, not part of the problem

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Opioids the Panacea?

"There are concerns that increased attention to pain intensity ratings may lead to overly aggressive use of opioid analgesics … Appropriate responses may not always include more opioids but rather more detailed assessments ..."

(Gordon, 2005)

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Conclusion

- A full assessment is critical to establishing diagnoses and comorbidities
- A full list of diagnoses is critical to establish a global treatment plan
- A list of comorbidities is critical to establish further treatments unrelated to pain, but impacting pain
- Realistic pain goal is 30% or so reduction
- More important goals are functionality, QOL, sleep
- Build professional relationships, physical therapy, psychology, etc ...

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Case Study

- Leona, 52 yo woman patient presents with back pain
- Now how do we approach this patient?

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Thank you.

Questions?

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