



Chronic Pain Assessment

Michael R. Clark, MD, MPH, MBA

-
- Michael R. Clark, MD, MPH, MBA
 - Vice Chair, Clinical Affairs
 - Director, Pain Treatment Program
 - Department of Psychiatry & Behavioral Sciences
 - Johns Hopkins Medicine
 - Baltimore, Maryland, USA



Disclosure

- Nothing to disclose



Learning Objectives

- Describe a comprehensive stepwise approach to the assessment and formulation of patients with chronic pain
- Review the role and importance of the complete assessment of common comorbidities in the treatment of chronic pain
- Explain the multiple complex issues needing to be addressed to be more successful in the treatment of the patient with chronic pain
- Emphasize the importance of reassessment and treatment plan modification in ongoing follow-up to optimize function
- Identify support tools available to the primary care clinician managing a patient with chronic pain



American Pain Foundation, 2007; <http://www.painfoundation.org>

The Problem of Chronic Pain

- U.S. Center for Health Statistics conducted an 8-year follow-up survey and found that 32.8% of the general population experienced chronic pain symptoms
- Chronic pain affects about 100 million American adults (more than the total affected by heart disease, cancer, and diabetes combined)
 - 56% suffered with pain for more than 5 years
 - Only 22% ever referred to a pain specialist (DeLuca, 2001)
 - 28% of these did not have pain controlled (APS, 1999)
- In a community sample of individuals older than 70, chronic pain was present in 52% with one-third of persons over 75 rating pain as severe
- Pain also costs the nation up to \$635 billion each year in medical treatment and lost productivity

Magni et al., 1993; IOM, 2011; McCarthy et al. 2009; Brattberg et al. 1996

PainWeek

The Need for “Good” Treatment

- Patients with chronic pain suffer dramatic reductions in physical, psychological, and social well being with Health Related Quality of Life rated lower than those with almost all other medical conditions
- Considerable variability in the type of practitioners and scope of practice of “multidisciplinary” pain clinics
- Evidence based practice guidelines emphasize interdisciplinary rehabilitation, integrated treatment, and patient selection criteria
- Interdisciplinary pain rehabilitation programs provide a full range of treatments for the most difficult pain syndromes within a framework of collaborative ongoing communication

PainWeek

O'Connor, 2009; Sander et al., 2005; Stanos and Houle, 2006; Peng et al., 2008

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’Rourke, 2007)
 - Becoming worse as draconian legislation is enacted

PainWeek.

What is 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)
- A complete assessment and formulation is essential for the successful treatment and rehabilitation of this complex patient

PainWeek.

The Complexity of Chronic Pain

- Current pain intensity
- Other concomitant symptoms
- Medical comorbidities
- Psychiatric and psychological comorbidities
- Risk for medication abuse and diversion
- Number of chronic pain problems
- Number of past surgeries
- Medication side effects
- Extensive healthcare utilization
- Body mass index
- Sleep disorders
- Head trauma history
- Tobacco usage
- Goal setting
- Educational level and employment status
- Current pharmacotherapy regimen
- Coping skills and social support
- Physical conditioning

Peppin, et., al., 2015

PainWeek

Assessment: General

- Detailed history
 - Pain characteristics
 - Review of medical records
 - Prior diagnoses, therapies
 - Physical, psychological comorbidities
- Physical examination
 - Musculoskeletal
 - Neurologic
- Diagnostic studies
- Clinical considerations
 - Pain etiologies, characteristics
 - Effect on biopsychosocial domains including risk for addiction
- Challenges
 - Lack of a specific measurement tool that can prove presence or intensity of pain
 - Inaccurate patient descriptions
 - Degree of pain OR relief

Treatment based on initial assessment and regular reassessments
that are comprehensive, individualized, documented

PainWeek

AMA. http://www.ama-cmeonline.com/pain_mgmt/printversion/ama_painmgmt_m1.pdf; Argoff CE. J Am Osteopath Assoc 2002;102(9 suppl 3):S21-S27; Sinatra R. J Am Board Fam Med. 2006;19:165-177

Assessment: Specific

- Functional assessment
 - Does the pain interfere with activities: sleeping, eating, walking, rising/sitting, hygiene, sex, relationships?
- Psychological assessment
 - Does the patient have concomitant depression, anxiety, or mental status changes?
- Medication history
 - What medications have been tried in the past?
 - Which medications have helped?
 - Which medications have not helped?
 - Have they gotten into trouble with medications?

PainWeek

The Initial Hurdle

- Patient's self-report
 - Gold standard except when the patient cannot describe pain
- Nonverbal behaviors
 - Under both direct and indirect observation
- Collateral information from family, friends, practitioners
 - Especially important for patients who cannot verbalize pain
- Physiologic measures (least sensitive)
 - Acute pain may elicit a change in vital signs;
over time physiologic response to pain may not be seen

PainWeek

McCaffery M, Pasero C. Pain: Clinical Manual. p 95. 1999 Mosby, Inc.

Helpful Mnemonics: Overall Format

- HAMSTER
 - HISTORY
 - ASSESSMENT
 - MECHANISM of pain
 - SOCIAL and psychological factors
 - TREATMENT
 - EDUCATION
 - REASSESSMENT

PainWeek.

Helpful Mnemonics: HPI

- L-DOC-SARA
 - Location
 - Duration
 - Onset
 - Characteristic
 - Severity and pain goal
 - Aggravating factors
 - Relieving factors
 - Associate symptoms

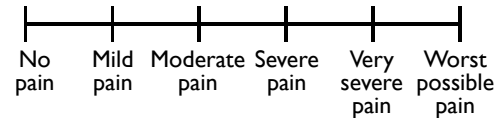
PainWeek.

Unidimensional Pain Assessment Tools

Visual Analog Scale¹



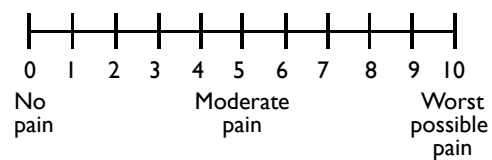
Verbal Pain Intensity Scale¹



Wong-Baker Faces Scale²



0–10 Numeric Pain Intensity Scale³



PainWeek

1. Kremer E, et al. *Pain*. 1981;10:241-248
2. Bieri D, et al. *Pain*. 1990;41:139-150
3. Farrar JT, et al. *Pain*. 2001;94:149-158

Psychological Assessment: General

- Evaluate for depression, anxiety, suicidal ideation, sexual abuse, addiction, cognitive impairment
- Screens find cases but do not make diagnoses
 - Help place patients in risk category
 - Patient Health Questionnaire (PHQ-9)
 - Thase, 2016; Moriarty, 2015; Siu, 2016
 - USPSTF recommended (AHRQ)
 - Skeptical psychometrics
 - Multiple scales
 - Beck Depression Inventory
 - Hamilton Rating Scale
 - Zung Self-Rating Scale

PainWeek

Catastrophizing

- “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
- Responses to treatment

PainWeek.

Kinesiophobia

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

PainWeek.

Chemical Coping

- “Middle ground between compliant medication use and addiction.” (Kirsh, 2007)
 - “The use of opioids to cope with emotional distress, characterized by inappropriate and/or excessive opioid use.” (Kwong, 2015)
 - Important distinction from seeking primary drug-effect
 - Screening tool (Kirsh, 2007)
 - Poor prognosticator for efficacy of treatment and reduction in pain (Delgado-Guay, 2015)

PainWeek.

Substance Use Disorder

- Screen to indicate need for evaluation (O’Brien, 2008)
- CAGE (Ewing, 1984)
 - 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

PainWeek.

Generalized Broader Assessments

- Brief Pain Inventory
 - https://www.painedu.org/Downloads/NIPC/Brief_Pain_Inventory.pdf
- McGill Pain Questionnaire
- PHQ-9
- Just Ask!
 - “Are you at risk to yourself or others?”
 - “Any history of physical or sexual abuse?”

PainWeek

Collateral Information

- There is no single diagnostic test for pain
 - Imaging, neurophysiologic testing, laboratory studies
- Confirm or exclude underlying causes such as rheumatoid arthritis, diabetic neuropathy, spinal disorders, HIV/Hep C, herpes viruses, vitamin deficiencies, autoimmune disorders, malignancies
- Multiple tests may not be helpful and produce false positive results
- The best source of data is old records from previous practitioners

PainWeek

Developing a Care Plan

- Working diagnosis
 - Pain etiology
 - Pain syndrome
 - Inferred pathophysiology
- Initial treatment
 - Individualized based on pain intensity, duration, disease, tolerance of AEs, risk for aberrant behavior
 - May be stepwise in nature
 - May involve multidisciplinary team
 - May include behavioral + nonpharmacologic + pharmacologic modalities
 - May include analgesics with different, complementary MOAs and agents to reduce other symptoms (depression, anxiety, sleep disturbance, fatigue)



Zorba-Paster R. *Expert Opin Pharmacother.* 2010;11:1823-1833

Risk of Abuse, Misuse, Diversion, and Overdose Death

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

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



Aberrant Drug-Taking Behaviors

Probably <u>More</u> Predictive of Addiction	
Selling prescription drugs	Prescription forgery
Stealing or "borrowing" drugs	Injecting oral formulations
Obtaining prescription drugs from nonmedical sources	Concurrent abuse of alcohol or illicit drugs
Multiple dose escalation or other noncompliance with therapy despite warnings	Multiple episodes of prescription "loss"
Repeatedly seeking prescriptions from other clinicians or from emergency departments without informing prescriber or after warnings to desist	Evidence of deterioration in the ability to function at work, in the family, or socially that appears to be related to drug use
Repeated resistance to changes in therapy despite clear evidence of adverse physical or psychological effects from the drug	

Portenoy RK. *J Pain Symptom Manage.* 1996;11:203-217

PainWeek

Aberrant Drug-Taking Behaviors (cont'd)

Probably <u>Less</u> Predictive of Addiction	
Aggressive complaining about the need for more drugs	Drug hoarding during periods of reduced symptoms
Requesting specific drugs	Openly acquiring similar drugs from other medical sources
Unsanctioned dose escalation or other noncompliance with therapy on 1 or 2 occasions	Unapproved use of the drug to treat another symptom
Reporting psychic effects not intended by the clinician	Resistance to a change in therapy associated with "tolerable" adverse effects with expressions of anxiety related to the return of severe symptoms

Portenoy RK. *J Pain Symptom Manage.* 1996;11:203-217

PainWeek

Reassessment: Key to Treatment Efficacy

- Consistent reassessment is critical
 - Upfront time investment worth the effort
 - Shortens subsequent visits
 - But still reassessment should include:
 - Treatment efficacy, goals, medication side effects, QOL, etc
 - Address appropriate medication usage
 - Re-review medications, OTC, prescription, supplements
 - Other medical problems that may have surfaced since last visit
 - Readdress psychological health
 - Readdress functionality
 - Other
 - Physical examination

PainWeek.

Helpful Mnemonics: Follow-Up

- Four As
 - Analgesia
 - Adverse side effects
 - Activities of daily living
 - Aberrant behavior

PainWeek.

Principles of Pain Management

- Individualize pain management
- Assess and treat disability and physical, psychosocial, and psychological comorbidities^{1,2}
- Select simplest approach using multimodal therapy (pharmacologic and nonpharmacologic)^{1,2}



1: American Medical Association. Pain management. http://www.ama-cmeonline.com/pain_mgmt/
2: American Pain Society, 2007. <http://www.ampainsoc.org>

Principles of Pain Management (cont'd)

- Consider expert consultation if:
 - Uncertainty about diagnosis
 - Specialized treatment (eg, nerve block) is indicated
 - Unable to achieve pain and functional goals
 - Discomfort with opioid therapy in person with a history of substance abuse
 - Evidence suggests opioid misuse/abuse
 - Several treatments/combinations tried without success



Conclusion

- Evaluate/adopt personalized “step approach” to pain assessment/management (eg, HAMSTER)
- Identify pain tools that work for your practice
- Set realistic, achievable goals in pain reduction
- Comprehensive management should include combination of nonpharmacologic/pharmacologic therapy
- Seek to minimize specialist referrals, only for times when absolutely necessary

PainWeek

References

- Ad Hoc Committee on Medical Ethics. (1984). American College of Physicians Ethics Manual. *Annals of Internal Medicine*, 101, 129-137, 263-274
- American Pain Society. Chronic Pain in America: Roadblocks to Relief. 1999. Available at http://www.ampainsoc.org/links/roadblocks/summary1_road.htm. Accessed July 24, 2009
- Baglan, S., et al. "AB1243-HPR The Relationship Between Kinesiophobia and Pain, Physical Activity, Depression, Fatigue, Disease Activity and Quality of Life in Patients with Systemic Lupus Erythematosus." *Annals of the Rheumatic Diseases* 74.Suppl 2 (2015): 1350-1350
- Baranoff, J., et al. "Acceptance as a process variable in relation to catastrophizing in multidisciplinary pain treatment." *European Journal of Pain* 17.1 (2013): 101-110
- Bean WB (ed): Sir William Osler: Aphorisms From His Bedside Teachings and Writings Collected by Robert Bennett Bean, M.D. New York, Henry Schuman Inc, 1950
- Brown RL, Rounds LA. Conjoint screening questionnaires for alcohol and other drug abuse: criterion validity in a primary care practice. *Wis Med J*. 1995; 94: 135-40 Available at: <http://www.ncbi.nlm.nih.gov/pubmed/7778330>

PainWeek

References (cont'd)

- Brunelli, Cinzia, et al. "Comparison of numerical and verbal rating scales to measure pain exacerbations in patients with chronic cancer pain." *Health and quality of life outcomes* 8.1 (2010): 1
- Carr DB, Goudas LC. Acute pain. *Lancet*. 1999;353:2051-2058
- Chou, Roger, et al. "Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society." *Annals of internal medicine* 147.7 (2007): 478-491
- Clinical preventive service recommendation: depression. American Academy of Family Physicians. <http://www.aafp.org/patient-care/clinical-recommendations/all/depression.html> Accessed July 14, 2015
- Delgado-Guay MO, Bruera E. "Multidimensional patient assessment." *Textbook of Palliative Medicine and Supportive Care* (2015): 323
- DeLuca A. Chronic Pain in America: Roadblocks to relief. 2001. Available at <http://www.doctordeluca.com/Library/Pain/ChronicPainRoadblocks.htm>. Accessed July 24, 2009

PainWeek

References (cont'd)

- C, Bennett DS, Hagen JE, Passik SD. Initial development of a survey tool to detect issues of chemical coping in chronic pain patients. *Palliat Support Care*. 2007;5:219-226
- Ewing JA. Detecting alcoholism: the CAGE questionnaire. *J Am Med Assoc* (1984) 252:1905–7. doi:10.1001/jama.252.14.1905
- Fishman, Scott M., et al. "Core competencies for pain management: results of an interprofessional consensus summit." *Pain Medicine* 14.7 (2013): 971-981
- Gordon DB, Dahl JL, Miaskowski C, et al. American Pain Society Recommendations for Improving the Quality of Acute and Cancer Pain Management: American Pain Society Quality of Care Task Force. *Arch Intern Med*. 2005;165(14):1574-1580. doi:10.1001/archinte.165.14.1574
- Gourlay, Douglas L., Howard A. Heit, and Abdulaziz Almahrezi. "Universal precautions in pain medicine: a rational approach to the treatment of chronic pain." *Pain Medicine* 6.2 (2005): 107-112
- <http://diginole.lib.fsu.edu/islandora/object/fsu%3A207738/datastream/PDF/view>. Accessed March 13, 2016

PainWeek

References (cont'd)

- <http://www.iasp-pain.org/Taxonomy#Peripheralneuropathicpain>. Accessed March 12, 2016
- <http://www.pearsonclinical.com/psychology/products/100000095/battery-for-health-improvement-2-bhi-2.html>
- <http://www.sf-36.org/tools/sf36.shtml>, accessed March 12, 2016
- Huth EJ, Murray TJ (eds): *Medicine in Quotations: Views of Health and Disease Through the Ages*. Philadelphia, American College of Physicians, 2000
- IASP, <http://www.iasp-pain.org/Education/Content.aspx?ItemNumber=1698&navItemNumber=576#Pain>. 2011
- IOM. *Relieving pain in America: A blueprint for transforming prevention, care, education and research*. Washington, DC: The National Academics Press; 2011

PainWeek

References (cont'd)

- Kirsh KL, Jass Kwon, Jung Hye, David Hui, and Eduardo Bruera. "A Pilot Study To Define Chemical Coping in Cancer Patients Using the Delphi Method." *Journal of palliative medicine* 18.8 (2015): 703-706
- Lentz Ta. Pain-Related Fear Contributes To Self-Reported Disability In Patients With Foot And Ankle Pathology. *Archives of Physical Medicine and Rehabilitation*. 2010;91:557-561
- Moriarty, Andrew Stephen, et al. "Screening and case finding for major depressive disorder using the Patient Health Questionnaire (PHQ-9): a meta-analysis." *General hospital psychiatry* 37.6 (2015): 567-576
- O'Brien, Charles P. "The cage questionnaire for detection of alcoholism." *JAMA* 300.17 (2008): 2054-2056
- O'Rorke JE, Chen I, Genao I, et. al. Physicians' comfort in caring for patients with chronic nonmalignant pain. *Am J Med Sci*. 2007;333(2):93-100
- Passik SD, Kirsh KL, Casper D. Addiction-related assessment tools and pain management: instruments for screening, treatment planning and monitoring compliance. *Pain Med*. 2008; 9: S145-S166

PainWeek

References (cont'd)

- Peppin, John F., et al. "The complexity model: a novel approach to improve chronic pain care." *Pain Medicine* 16.4 (2015): 653-666
- Peppin, J.F., Passik S. D., Couto, J.E., Fine, P.G., Christo P.J., Argoff C. Aronoff, G.M., Bennett, D. Cheatle, M.D., Slevin K.A. & Goldfarb, N.I. (2012). Recommendations for Urine Drug Monitoring as a Component of Opioid Therapy in the Treatment of Chronic Pain. *Pain Medicine*. 13:886-896
- Pizzo, Philip A., and Noreen M. Clark. "Alleviating suffering 101—pain relief in the United States." *New England Journal of Medicine* 366.3 (2012): 197-199
- Quartana PJ, Campbell CM, Edwards RR. Pain catastrophizing: a critical review. *Expert review of neurotherapeutics*. 2009;9(5):745-758. doi:10.1586/ERN.09.34
- Rowbotham MC. Mechanisms of neuropathic pain and their implications for the design of clinical trials. *Neurology*. 2005;65(Suppl 4). S66-S73
- Siu, Albert L., et al. "Screening for depression in adults: US Preventive Services Task Force recommendation statement." *JAMA* 315.4 (2016): 380-387

PainWeek

References (cont'd)

- Sullivan MJ, Bishop SR, Pivik J. The Pain Catastrophizing Scale: development and validation. *Psychol Assess*. 1995;7:524–532
- Tan, Gabriel, et al. "Validation of the Brief Pain Inventory for chronic nonmalignant pain." *The Journal of Pain* 5.2 (2004): 133-137
- Thase, Michael E. "Recommendations for Screening for Depression in Adults." *JAMA* 315.4 (2016): 349-350
- Upshur CC, Luckmann RS, Savageau JA. Primary care provider concerns about management of chronic pain in community clinic populations. *J Gen Intern Med*. 2006;21(6):652-655
- van Dijk, Jacqueline FM, et al. "Postoperative pain assessment based on numeric ratings is not the same for patients and professionals: a cross-sectional study." *International journal of nursing studies* 49.1 (2012): 65-71
- Verhaak, Peter FM, et al. "Prevalence of chronic benign pain disorder among adults: a review of the literature." *Pain* 77.3 (1998): 231-239

PainWeek