PAINWEEK®

Chronic Pain Assessment

Michael R. Clark, MD, MPH, MBA

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

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

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'Rouke, 2007)
    - Becoming worse as draconian legislation is enacted

Inadequate Preparation and Training

- 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 nutrition
  - —Very few hours in use of opioids
  - —Almost no hours in opioid side effects
  - —Almost no hours in pain assessment

Definitions: Pain & Acute Pain

- Pain
  - "An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage." (IASP, 2011)
- Acute pain
  - < 3-6 months
  - 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)
  - Related to tissue damage/injury
    - Cuts, abrasions, fractures, sprains, surgeries
  - Physiologically important protective function

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

Definitions: Chronic Pain

- Duration: >3-6 months
  - Some definition schemas describe "subacute" as 3-6 months
- Determined cause with appropriate evaluation and assessment usual
- Prevalence
  - In 15 studies reviewed, the median point prevalence of chronic pain = 15% in the adult population
  - Range of 2% - 40% (Verhaak, 1998)

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

The Complexity of Chronic Pain

- Current pain intensity
- Other concomitant symptoms
- Medical co-morbidities
- 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

The Initial Hurdle

- Patient's Self-Report
  - —Gold standard except when the patient cannot describe pain
- Non-Verbal 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

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

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

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?

Helpful Mnemonics: Overall Format

- HAMSTER
  - HISTORY
  - ASSESSMENT
  - MECHANISM of Pain
  - SOCIAL and Psychological Factors
  - TREATMENT
  - EDUCATION
  - REASSESSMENT

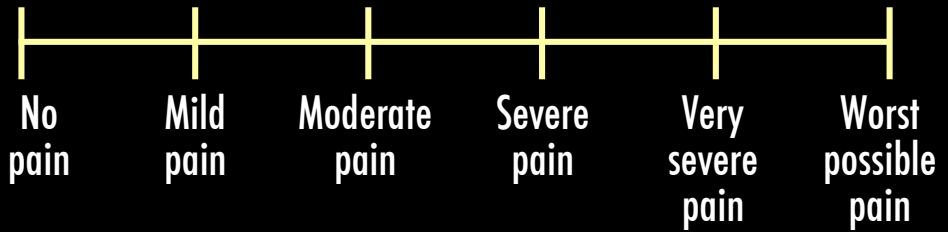
Helpful Mnemonics: HPI

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

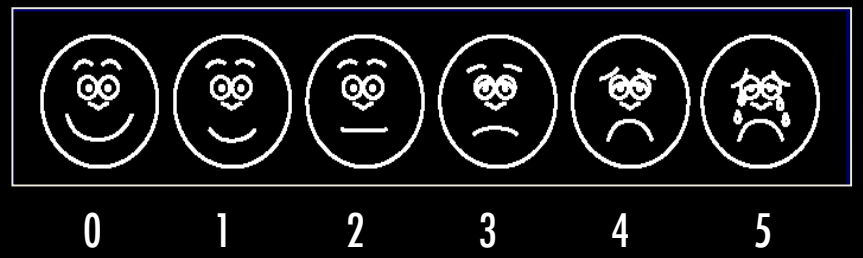
Unidimensional Pain Assessment Tools

Visual Analog Scale[1]

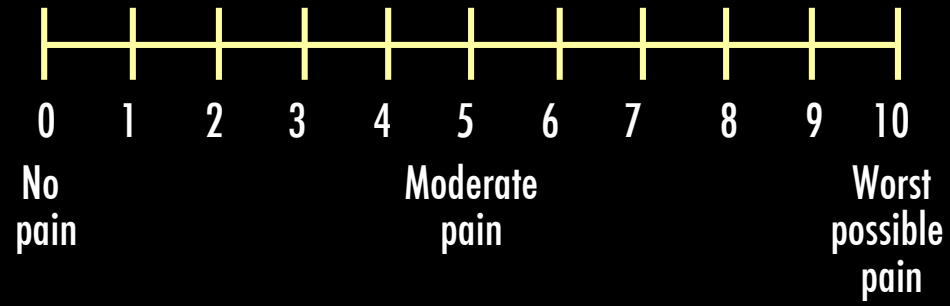
Verbal Pain Intensity Scale[1]



Wong-Baker Faces Scale[2]

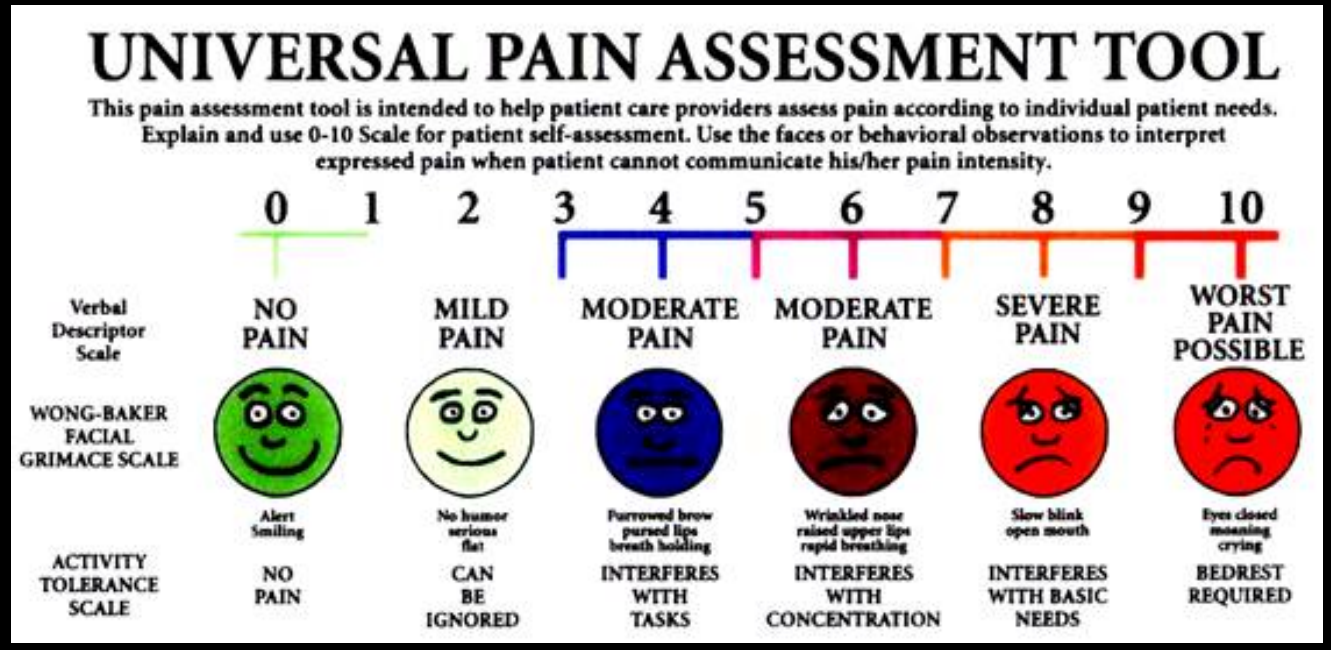


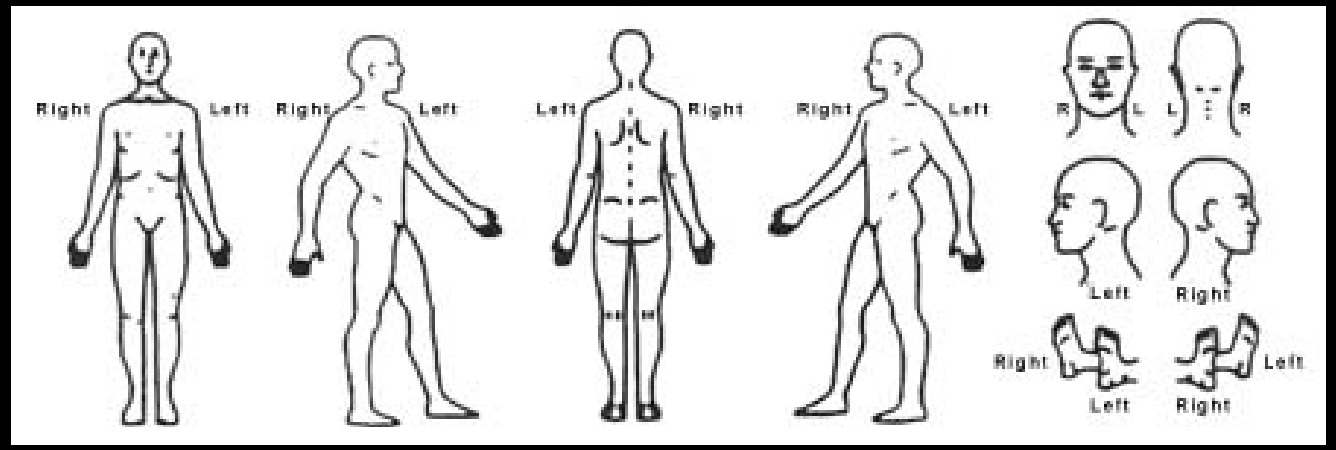
0–10 Numeric Pain Intensity Scale[3]



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

Pain Scales and Assessment





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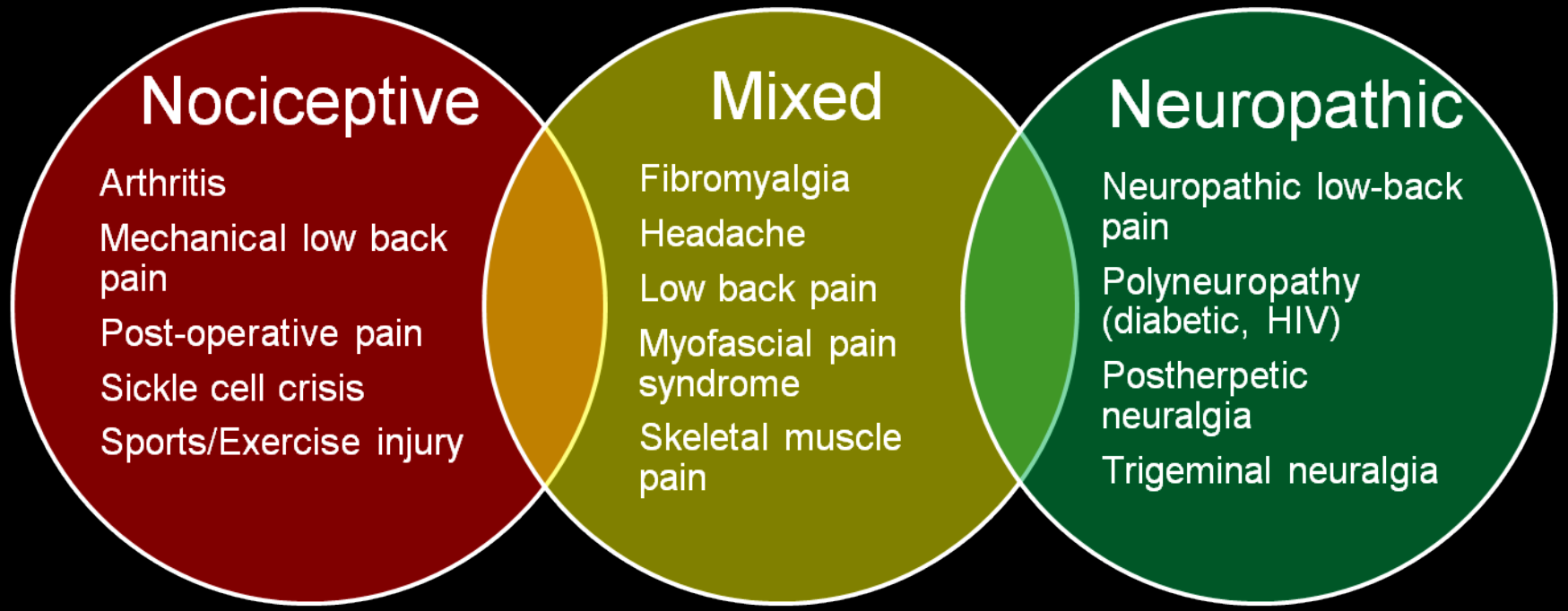
Nociceptive vs Neuropathic Pain



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2: Galer BS, Dworkin RH. A Clinical Guide to Neuropathic Pain. Minneapolis, MN: McGraw-Hill Companies Inc; 2000:8-9

Physical Examination: General

- Full head to toe
  - Differential diagnosis should be already established
    - Physical examination helps confirm the diagnosis
- Include a full ROS as you do the PE
- Always have a chaperone
- Patient should be in a gown!
  - Sir William Osler: "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." (Bean, 1950)

Physical Examination: Specific

- Facts missed in the history, can be discovered
  - —Unexpected signs
  - —Absence of expected findings
- Co-morbidities can be determined
  - —Heart murmurs, skin abnormalities, skeletal deformities
- Sir William Osler:
  - —"One finger in the throat and one in the rectum makes a good diagnostician." (Huth, 2000)

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

Psychological Assessment: Specific

- Look for psychological warning signs
  - Suicidal ideation
  - Anergia
  - Anhedonia
  - Anorexia
  - Intoxication
  - Lack of acceptance
  - Poor goals
  - Outbursts of anger
  - Catastrophizing

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

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

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)

CAGE

- 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

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."
- SF-36
  - Over 4000 publications
  - Physical and mental health

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

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."

Diagnostics

- There is no single diagnostic test for pain
- Confirm or exclude underlying causes such as rheumatoid arthritis, diabetic neuropathy, spinal disorders, HIV, herpes viruses
- Multiple tests may not be helpful

Diagnostics and Other Data

- Review old records
  - Order them from the specific physician and office
- Imaging only when it may change your diagnosis and treatment
- Neurophysiologic studies (NCS/EMG)
  - Only when it will change your diagnosis and treatment
- Laboratories
  - Vitamin D, hormonal studies (especially if on opioids)
  - TSH, B12 (folate), other labs as necessary

Assessment and then 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)

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 modalitites
  - 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

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

- 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

Helpful Mnemonics: Follow-Up

- Four A's
  - Analgesia
  - Adverse Side Effects
  - Activities of Daily Living
  - Aberrant Behavior

Risk of Abuse, Misuse, Diversion, and Overrdose Death

- Universal Precautions (Gourlay, 2005)
- Risk Screening Tools (Passik, 2008)
  - ORT – Opioid Risk Tool
  - SOAAP - Screener 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

Urine Drug Monitoring

- Identifying drug use behaviors subjectively is difficult
  - —All patients prescribed short- or long-acting opioid >3 months should be tested
  - —Agreements and clear policy
- Comprehensive Quantative UDM
  - —If POC, quantitative testing is abnormal
- Further testing based on risks
  - —Minimum every 6 months
- Consensus based on weak evidence

Peppin, et. al., 2011

Aberrant Drug-Taking Behaviors

Probably More 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

Aberrant Drug-Taking Behaviors

Probably Less 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

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

Reassessment: Key to Treatment Efficacy

"Physicians should frequently reassess pain relief, side effects,
and adverse events, as well as
the impact of pain and treatment on
patient function and quality of life.
Each patient represents an individual therapeutic
experiment requiring frequent reassessments
and analgesic titration."
(Gordon, 2005)

Assessment: A Practical Approach

- Overview
  - Full history
    - All pain triggers
  - Allergies, family history, immuinization 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

Assessment: A Practical Approach

- 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

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

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