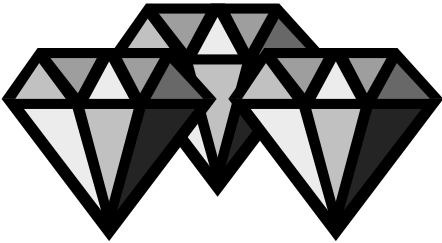



FACETS of Pain Management



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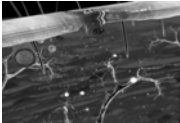
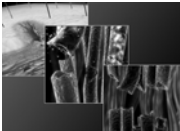



Etiology-Based Treatment of Pain



Anatomy and Physiology of Pain: Etiology



- **Nociceptive**
 - Somatic
 - Visceral
- **Neuropathic (Non-Nociceptive)**
 - Central
 - Peripheral

Passero C, Paice J, McCaffery M. Basic mechanisms underlying the causes and effects of pain. In: *Pain: Clinical manual*. 2nd ed. St. Louis, MO: Mosby, Inc.; 1999:15-34.

Nociceptive Somatic Pain

- **Characteristics:**
 - located in soft tissue, bone, and joints that contain nociceptors
 - usually well localized
 - continuous
 - aching, dull, gnawing, nagging
- **Examples:**
 - bone fracture, arthritis, bone metastasis
 - post-operative surgical incision, mucositis

Passero C, Paice J, McCaffery M. Basic mechanisms underlying the causes and effects of pain. In: *Pain: Clinical manual*. 2nd ed. St. Louis, MO: Mosby, Inc.; 1999:15-34.
Griffin MC, Lipman AG. Chronic nonmalignant pain. In Lipman AG ed-in-chief. *Pain Management for Primary Care Clinicians*. Bethesda, MD: ASHP; 2004:153-164.

Nociceptive Visceral Pain

- Characteristics:
 - pain referred to distant sites from viscera that do not contain nociceptors
 - poorly localized
 - sharp, deep, gnawing, vague, pressure
 - may worsen with movement or deep inspiration
- Examples:
 - liver disease, liver cancer/liver metastasis
 - pancreatic cancer, pancreatitis, pneumonia



Passero C, Paice J, McCaffery M. Basic mechanisms underlying the causes and effects of pain. In: *Pain: Clinical manual, 2nd ed.* St. Louis, MO: Mosby, Inc.; 1999:15-34.
Gitlin MC, Lipman AG. Chronic nonmalignant pain. In Lipman AG ed-in-chief. *Pain Management for Primary Care Clinicians*. Bethesda, MD: ASHP; 2004:153-164.

Neuropathic Pain: Centrally Generated

- Deafferentation pain: Injury to either peripheral or central nervous system
 - Peripheral: phantom limb pain
 - Central: burning pain below the level of a spinal cord lesion
- Sympathetically maintained pain: Associated with dysregulation of autonomic nervous system
 - Complex regional pain syndrome (Type I/II)



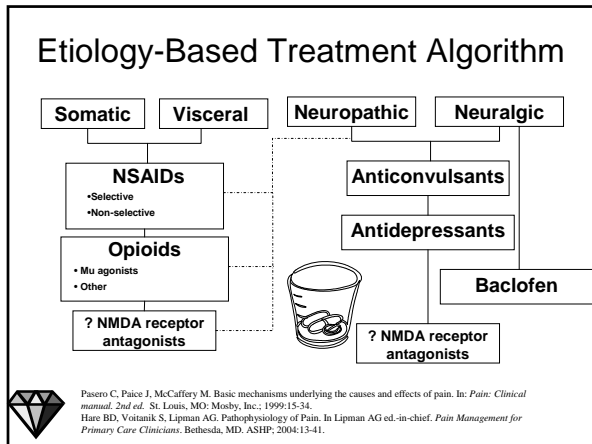
Passero C, Paice J, McCaffery M. Basic mechanisms underlying the causes and effects of pain. In: *Pain: Clinical manual, 2nd ed.* St. Louis, MO: Mosby, Inc.; 1999:15-34.
Belgrade MJ. Following the clues to neuropathic pain. *Postgrad Med.* 1999;106:127-139.

Neuropathic Pain: Peripherally Generated

- Painful polyneuropathies:
 - Pain along the distribution of many peripheral nerves
 - Peripheral neuropathy
- Painful mononeuropathies:
 - Associated with a known peripheral nerve injury
 - Pain felt at least partly along the distribution of the damaged nerve
 - Nerve root compression or entrapment
 - Trigeminal neuralgia

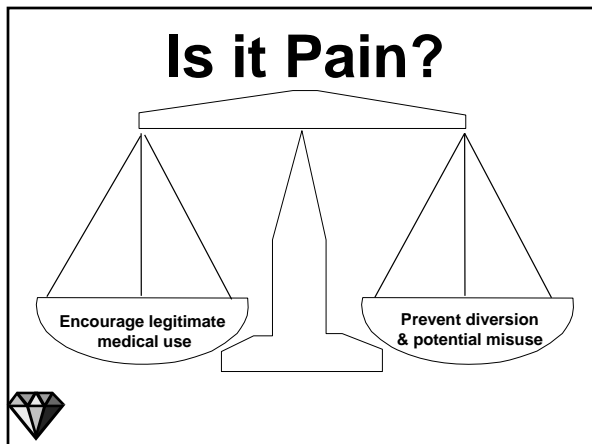


Passero C, Paice J, McCaffery M. Basic mechanisms underlying the causes and effects of pain. In: *Pain: Clinical manual, 2nd ed.* St. Louis, MO: Mosby, Inc.; 1999:15-34.



What is the etiology of pain in these patients?
What class of medication would you pick?

- 68 y.o. female, history of diabetes, reports pins, needles and numbness in feet bilaterally with new onset burning sensation
- 48 y.o. male, history of EtOH abuse presents to ER, reports abdominal pain that is deep, gnawing, and occasionally sharp upon inspiration
- 70 y.o. male history of prostate cancer, reports increasing hip pain described as a constant, aching, dull pain increased on ambulation



TK

- 35 year old Hispanic male
- Divorced, seasonal construction worker
- 10 month history of low back pain following work related injury – has been unable to work since
- New to town, no previous healthcare locally
- Presents to you as 3rd healthcare provider, since accident, to address pain issues
- Requests oxycodone/acetaminophen



What is your clinical impression?

Differences Between Patients with Physical Dependence and Addiction

Addiction is a disease; physical dependence is not addiction

	Physical dependence	Addiction
Out of control with medications	No	Yes
Medications improve quality of life	Yes	No
Use continues in spite of problems caused by medications	No	Yes
Denial about any problems caused by medications	No	Yes



Adapted from: Schnoll SH, Finch J. Medical education for pain and addiction: making progress toward answering a need. / *Law Med Ethics*. 1994;22:252-256.

Key Definitions

The ASAM, AAPM, and APS recognize the following definitions as appropriate and clinically useful and recommends their use when assessing the utilization of opioids in the context of pain treatment.

- **Physical dependence** –
A state of adaptation that is manifested by a drug class specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist.
- **Tolerance** –
A state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more of the drug's effects over time.
- **Addiction** –
 - A primary, chronic, neurobiologic disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations.
 - It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.



A consensus document from the American Academy of Pain Medicine, American Pain Society, American Society of Addiction Medicine. *Definitions Related to the Use of Opioids for the Treatment of Pain*. 2001.

Pseudoaddiction

- An iatrogenic misinterpretation of relief seeking behaviors caused by undertreatment of pain that is misidentified by the clinician as inappropriate drug-seeking behavior
- Behaviors cease when adequate pain relief is provided
- Not a diagnosis, rather a description of a clinical interaction



Weissman DE, Haddox JD. Opioid pseudoaddiction—an iatrogenic syndrome. *Pain*. 1989;36:363-366.

RS

- 35 year old white male
- Seasonal construction worker, married with 3 children
- 10 month hx of low back pain following a work related injury – has been unable to work since
- New to town, no previous healthcare locally
- Requests oxycodone/acetaminophen



What is your clinical impression?

Aberrant Drug-Related Behaviors

Probably More Predictive

- 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 unsanctioned dose escalations
- Repeated episodes of prescription “loss”



Adapted from: Portenoy RK. Opioid therapy for chronic nonmalignant pain: a review of the critical issues. *J Pain Symptom Manage*. 1996;11:203-217.

Aberrant Drug-Related Behaviors

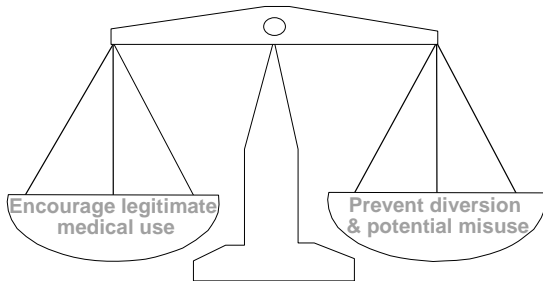
Probably Less Predictive

- Aggressive complaining about the need for higher doses
- Drug hoarding during periods of reduced symptoms
- Requesting specific drugs
- Prescriptions from multiple physicians
- Unsanctioned dose escalation
- Unapproved use of the drug
- Reporting psychic effects not intended by the physician
- Use of multiple pharmacies



Adapted from: Portenoy RK. Opioid therapy for chronic nonmalignant pain: a review of the critical issues. *J Pain Symptom Manage.* 1996;11:205-217.

Promoting Pain Relief & Preventing Potential Controlled Substance Misuse



Joint Statement from 21 Health Organizations and the Drug Enforcement Administration. Promoting pain relief and preventing abuse of pain medications: a critical balancing act. October 2001.
Hoffmann DE, Tarzian AJ. Achieving the right balance in oversight of physician opioid prescribing for pain: the role of state medical boards. *J Law Med Ethics.* 2003;31:21-40.

Educational and Advocacy Resources



- Healthcare Professionals
- Patients and Caregivers
- Health Systems

www.partnersagainstpain.com