Chronic Pain and Prescription Drug Abuse

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UCLA K30 Case Presentation
November 17, 2009
Case Study

• 46 y/o male c/o persistent low back pain that is “getting out of control”
  – Interfering with his job, driving a car, etc.
  – Intermittent radiating LBP started 18 years ago
  – Worsening pain since laminectomy 12 years ago
  – Stopped jogging 2 yrs ago because pain worse
  – Only palliated with Oxycodone
  – PMH: insulin-dependent, adult-onset diabetes with 10 years of neuropathy
  – SH: Recovery from alcoholism x 20 years
Case Study

- **Meds:** 20 mg sustained release Oxycodone BID, Metformin 500 mg BID, Glyburide 5 mg QD, 30 units Lantus QHS

- **Physical Examination**
  - Afebrile, BP 148/75, P84, RR12,
  - Obese (194 lbs, 5 ft 6 in)
  - Appears uncomfortable sitting, Normal gait
  - HEENT: Pupils sluggishly reactive to light, nasal septum with small areas of mucosal erosion
  - Neuro: 5/5 strength in all extremities; Bilateral feet with loss of pain, touch, proprioception
  - MSK: Laminectomy scars present. TTP over sacral, lumbar, lower thoracic paravertebrals. Spine c LROM due to pain
Case Study

• Laboratory data:
  – Negative qualitative urine drug screen
  – Serum glucose 260 mg/dl, Hb A1c 9.3%, platelets 177
  – Otherwise, normal CBC, Chemistry, Liver Fx

• Imaging (CT of spine)
  – Post-laminectomy changes. No bony lesions. Disc spaces mildly narrowed
Case Study

- Pt. admitted to hospital for pain control
- Anesthesiologist: titrates up oxycodone to 80 mg TID; 5 mg short-acting oxycodone q 6 hr prn breakthrough pain; endpoint: pain stabilized, improvement in function
- Endocrinologist: confirms evolution of diabetic neuropathy; recommend neuro consult
Case Study

- Neurologist: agrees case is evolving diabetic neuropathy (peripheral & autonomic); recommends against laminectomy for pain control
- Psychiatrist: evaluates sleep difficulty, decreased activity, social isolation; diagnoses major depression
Case Study

- Outcome: Pt’s pain stabilized and regained baseline function at sustained release oxycodone 80 mg TID. For next six months, more active socially and increased exercise. SE of tx: constipation
- On 7th month, wife took pt to Pain Management because pt was caught stealing rx pads from PCP’s office and forging additional oxycodone rx for himself
Case Study

• Pt was placed back on additional short-acting oxycodone 5 mg QID prn breakthrough pain, and referred to Addiction Medicine
• Pt diagnosed with opioid dependence; successfully converted from oxycodone to buprenorphine 18 mg/day; later dose was increased to 24 mg/day
• Once a week Narcotics Anonymous; Biweekly CBT session
• 10 months of sobriety and pain control so far
Definitions

• **Pain**: An unpleasant sensory & emotional experience associated with actual or potential tissue damage (International Association for the Study of Pain)

• **Chronic Pain**: Pain that persists beyond expected time of healing, or more than 3 to 6 months, and does not respond well to standard treatments.
Chronic Pain

- Associated with Cancer, AIDS, RA, OA, Spinal Stenosis, Failed Back Surgery*
- Nociceptive chronic pain: associated with normal nervous system, as in OA without radiculopathy, etc.
- Neuropathic chronic pain: associated with nervous system dysfunction, as in DN, postherpetic neuralgia

Substance (Opioid) Dependence

Diagnosed by 3 or more of the following in a 12 month period:

- Tolerance (increased amounts to reach desired effect, or diminished effect with same amt.)
- Withdrawal
- Using more in amount or time period than originally intended
- Persistent desire to cut down use (but unsuccessful)
- Great deal of time spent to acquire/use substance
- Important social/occupational/recreational activities given up for substance use
- Continued use despite negative consequences
Definitions

• **Addiction**: A psychic and physical state characterized by compulsive behavior to obtain a drug in order to experience its psychic effects, despite full knowledge of its harmful effects.
Current Dilemma

• How do we treat non-cancer chronic pain patients without causing iatrogenic addiction?
• We lack efficacious non-opioid pain meds
• Ethics class: Disagreement among FDA and Industry-sponsored statisticians on Lyrica’s efficacy for diabetic neuropathy
Current Dilemma

• In response to Cephalon’s application to expand indication for Fentanyl Buccal tablets from opioid-tolerant patients with chronic cancer pain to substantially larger population of opioid-tolerant patients with chronic non-cancer pain:

• “…FDA review found that the available data (unpublished observational data) suggested ‘an excess risk of events related to overdose, addiction, and CNS depression related to opioids in the non cancer population’ relative to the cancer population*
Treatment for Chronic Non-Cancer Pain is Controversial

• Opioids alone are “rarely effective” in treatment of chronic pain (American Pain Society)

• Meta-analysis of clinical evidence: opioids only efficacious for short-term treatment of pain (<16 weeks); long-term efficacy was “limited”*

*Martell, BA, O'Connor, PG et al. (2007) Systematic Review: Opioid Treatment for Chronic Back Pain*
Treatment: General Guidelines

• Prefer combination of different classes of pain meds at lower doses, than single high dose medication

• Prefer long-acting opioid formulations QD or BID for around-the-clock coverage

• Insufficient evidence to recommend one opioid over another*

Treatment Options

• Opioid analgesics (includes Tramadol)
• Acetaminophen
• NSAIDS
• ASA
• Anticonvulsants: Gabapentin, Pregabalin
• Tricyclic Antidepressants: Nortriptylline, Desipramine
• Topical: Capsaicin, Lidocaine patch
• Buprenorphine (if opioid dependence diagnosed)
• Buprenex (IV or IM only)
Treatment Options

- Stress relief/relaxation skills
- Physical Therapy
- Massage
- Acupuncture
- Yoga
- Cognitive Behavioral Therapy (change unhelpful thinking, improve pt’s understanding of his situation)
- Improved Sleep and Nutrition Habits
- Mild to moderate exercise
- Transcutaneous Electrical Nerve Stimulation
Prescription Opioid Addiction-Epidemiology

• 3.2% to 18.9% of patients with chronic non-cancer pain become addicted to their medications (Fishbain, DA, Rosomoff HL, Rosomoff, RS. 1992. Drug Abuse, Dependence, and Addiction in Chronic Pain Patients. Clinical Journal of Pain 8(2), 77-85.)

• However, 50-70 million people in the United States are undertreated or not treated for their painful conditions (Krames ES, Olson K. Clinical realities and economic considerations: patient selection in intrathecal therapy. J Pain Symptom Manage. 1997;14(suppl):S3-S13.)
How to balance both needs? Assess Risk Factors for Rx Opioid Abuse

- Heavy tobacco use
- Lifetime or family history of substance abuse (licit or illicit)
- Lifetime or family history of mental illness
- History of legal problems
- Lifetime or family history of behavioral addictions (gambling, shopping, sex, etc.)
Objective Screening Tools

• CDT (carbohydrate-deficient tranferrin): most sensitive test for alcohol abuse
• GGT (gamma glutamyl transpeptidase): more than 30 units per liter induced with 4 or more ETOH drinks/day x 2 weeks
• MCV: more than 95 microns/cubic ml in males, 100 microns/cubic ml in females
Obj. Screening Tools (cont.)

- LFTs
- Urine Drug Screens
- Physical Exam
  -- track marks on arms, feet
  -- skin erythema/ttp/hyperthermia
  -- sedation
  -- WD signs: anxiety, yawning, diaphoresis, joint rubbing, lacrimation, piloerection, rhinorrhea, mydriasis, N/V/D, tachycardia, low fever
Strategy: Risk-Adapted Therapy

• Don’t want to over-treat/under-monitor high risk patients, because they are more likely to develop addiction
• Don’t want to under-treat/over-monitor low risk patients, because this may lead to pseudo-addiction
• So stratify patients into 3 groups…
Group I- Primary Care Pts.

- No past or current history of substance use disorders
- Noncontributory family history with respect to substance use disorders
- Lack major or untreated psychopathologies
- Represents the majority of patients who will present to the primary care practitioner
Group II — Primary Care Patient With Specialist Support

- A past history of a treated substance use disorder or a significant family history of problematic drug use
- A past or concurrent psychiatric disorder
- Need consultation with appropriate specialist support (formal co-management or frequent monitoring for referral back for reassessment)
Group III — Specialty Pain and/or Addiction Management

- Active substance use disorder or major untreated psychopathology
- Pose significant risk both to themselves and to the practitioners who often lack the resources or experience to manage them
- Groups I to III can be dynamic:
  -- a group II patient may become a group III patient with relapse to active addiction
  -- group III patients can move to group II with appropriate treatment

-- Take home point: It is important to continually reassess risk over time because these patients can change lifestyles very quickly
Conclusion: Always use “Universal Precautions” in Prescribing Opioids for Chronic Pain*

- Make diagnosis with appropriate differential
- Complete psychological assessment with risk of addictive disorders
- Create a treatment agreement between patient and physician
“Universal Precautions” (cont.)

• Make pretreatment and post-intervention assessments of pain level and function
• Complete appropriate trial opioid therapy with or without adjunctive medicine
• Reassess pain score and level of function regularly
“Universal Precautions” (cont.)

• Regularly assess “Four A’s” of pain management: (Analgesia, Activity, Adverse effects, Aberrant behavior)

• Periodically review pain diagnosis and co-morbid conditions (such as addictive disorders)

• Carefully document treatment
Thank you!