Pain Management –
Opioids for Chronic Pain

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Disclosures

- Owner/Director – Comprehensive Pain Management of Central Connecticut, LLC (offices in Plainville, Bristol, and Southington, CT)
- AAAHC accredited office based practice
- President - CT Pain Society
- Carrier Advisor for Pain Management - Medicare
- Active member of the American Society of Interventional Pain Physicians (ASIPP, ASA)
- No outside funding or grants – unpaid consultant
* Overview
* Case Review
* Interventional (Integrational) Pain Management
* Opioids
* Management of Patients on Chronic Opioids
* Conclusions/questions
Poena (Latin)

“An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage”

International Association for the Study of Pain (IASP)
Interventional Pain Management is the discipline of medicine devoted to the diagnosis and treatment of pain-related disorders principally with the application of interventional techniques in managing subacute, chronic, persistent, and intractable pain, independently or in conjunction with other modalities of treatment.

NUCC definition

2002/2003
Chronic Pain Treatment Continuum

- **First-Tier Pain Therapies**
  - NSAIDs
  - TENS
  - Psychological Therapy
  - Nerve Blocks
  - Physical Therapy
  - OTC Pain Medications

- **Second-Tier Pain Therapies**
  - Opioids
  - Neurolysis
  - Thermal Procedures

- **Advanced Pain Therapies**
  - Neurostimulation
  - Implantable Drug Pumps
  - Surgical Intervention
  - Neuroablation
Case Review

* 43 year old male - labor intensive work
* Injured in 2007 at work
* Immediate back pain, no leg pain
* Went to Occ. Health – given vicodin/2weeks & anti-inflammatory & sent for PT
* After one month, no better with PT. Sent to ortho (shoulder specialist)
* MRI obtained – “mild L4-5 and mild L5-S1 disc bulging
Orthopedist orders “Series of 3 epidural steroid injections.”
Set up in the office to be performed by an anesthesiologist (NO FLUOROSCOPY)
No relief with any of the injections, yet series of 3 carried out. The patient noted no difference in his pain.
Patient followed up with his orthopedist (shoulder specialist) and was started on oxycontin 10mg twice a day. Also, soma four times a day.
“Bulging discs” generally do NOT cause PAIN
Patient care transferred for “pain management.”

One year later (still out of work), patient taking: Oxycontin 80mg three times a day, percocet 10mg/325mg - 6-8 a day, soma four times a day.
Case 1-continued

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* One year later (still out of work), patient taking: Oxycontin 80mg three times a day, percocet 10mg/325mg - 6-8 a day, soma four times a day.
Analgesic effect by inhibiting nociceptive signals within the CNS and activating the descending inhibitory system

- Primarily Mu receptors
  - found throughout the nervous system – centrally and peripherally
- Secondary receptors activated at higher doses → side effects
Side Effects of Opioids

- Opioids influence hypothalamic-pituitary-adrenal axis and the hypothalamic-pituitary-gonadal axis
- Immune modulation
- Endocrine dysfunction
- Depression
- Hyperalgesia
- GI- constipation
- Urinary retention
- Itching
- Sedation
- Respiratory Depression
- Euphoria
Chronic Non-Malignant Pain ???

* Studies support significant analgesic efficacy of opioids (morphine equivalent of 180 mg for 32 weeks)
* Evidence of their effect on functioning is mixed
* No evidence to support higher doses opioids for treatment of pain chronically
Today the US consumes most of the world’s supply of opioid painkillers.

By 2010 enough opioid painkillers were prescribed to medicate every American adult around the clock for a month.

About 1 in 20 people in the US 12 yrs. or older reported using opioid painkillers for non-medical purposes in 2010. This is more than the number of Americans abusing cocaine, heroin, hallucinogens and inhalants combined.

Source: DEA, ARCOS system, 2007

*Includes OTPs.
New Illicit Drug Use United States, 2006

- Pain Relievers: 2,150
- Tranquilizers: 2,063
- Cocaine: 1,112
- Ecstasy: 977
- Steroids: 860
- Inhalants: 845
- Sedatives: 783
- LSD: 367
- heroin: 264
- PCP: 91

*533,500 new nonmedical users of any illicit drug aged 12-17 years. Past year initiates for specific illicit drugs among people aged 12 years.
*SD, Seizure and withdrawl; PCP, Phencyclidine.

23 Million Americans suffer from substance abuse disorders.  
(Source: Substance Abuse: The Nation’s Number One Health Problem. Brander University Schneider Institute Health Policy 2001)  
In 2011, 1.8 Million People Abused or Were Dependent on Prescription Opioids.  
(US Dept. Health Services, SAMHSA 3/8/13)
Extent of Illicit Opioid use and Health Consequences

2010:

Estimated at 0.6-0.8 percent of the population aged 15-64
(between 26.4 million and 36 million opioid users)

Note: Global figures are not available for non-medical use of prescription drugs

(Recent statistics and trend compliances of Illicit Drug Markets.
In 2010, 12 million Americans (age 12y or older) reported non-medical use of “prescription painkillers”

In 2009, Marked increase from past years. Nearly half a million Emergency Department visits.

Quantity of pain pills sold to pharmacies, hospitals, doctor’s offices were four times larger in 2010 than in 1999.

In 2008/2009 non-medical use of painkillers ranged from 1 in 12 (age 12 years or older)

States with higher sales per person and more non-medical use of prescription painkillers tend to have more deaths from drug overdoses.

Prescription pain killer overdoses killed nearly 15,000 people in the U.S. (2008) – 3 times more than in 1999
Costs Related to Substance Use Disorders

**USA:**
$3.3 Trillion/yr. Spent by Federal and State Governments for Healthcare and Criminal Justice Industries (A large portion being spent on the decreased productivity and absenteeism within industries.)

**Global/International Basic Data:**
The 2005 UNODC World drug Report estimates that World Wide drug trade at $320 Billion
(source: Teromy Haken; “Transnational crime in the developing world”)
UN estimated Drugs and Transnational crime approximately 0.4% to 0.6% of the global GDP
Deaths per 100,000 related to unintentional overdose and annual sales of prescription opioids by year, 1990 - 2006

Source: Paulozzi, CDC, Congressional testimony, 2007
Unintentional drug overdose deaths are rising faster for prescription opioids than for illicit drugs.

Source: CDC, National Vital Statistics System, 2006
Where Pain Relievers Were Obtained
Most Recent Nonmedical Use among Past Year
Users Aged 12 or Older: 2006

Source Where Respondent Obtained

- More than One Doctor: 1.6%
- One Doctor: 19.1%
- Bought/Took from Friend/Relative: 14.8%
- Drug Dealer/Stranger/Other: 5.9%

Source Where Friend/Relative Obtained

- More than One Doctor: 3.3%
- Free from Friend/Relative: 7.3%
- Bought/Took from Friend/Relative: 4.9%
- Drug Dealer/Stranger/Other: 1.6%

Note: Totals may not sum to 100% because of rounding or because suppressed estimates are not shown.

1 The Other category includes the sources: “Wrote Fake Prescription,” “Stole from Doctor’s Office/Clinic/Hospital/Pharmacy,” and “Some Other Way.”
Why the Epidemic?

The answer is due to the following:

- A lack of evidence-based training knowledge regarding opioid dependency, as well as lack of understanding/knowledge of addiction disorders as a whole.

- A lack of interest to treat opioid dependent patients because of the negative stigma and negative experiences.

- A lack of understanding about the chronic disease paradigm of addiction as compared to chronic diseases like diabetes mellitus or hypertension.
Gauging the Risk of Opioid Addiction

- Genetics and Environment
  - Twin studies suggest that the degree of heritability of addictive disorders ranges between 40% and 70% depending on the substance being evaluated
  - Risk appears to be higher for first degree relatives as opposed to more distant relatives

- Most Important Indicator
  - Personal history of substance abuse is strongest risk factor for future abuse
Other predicting factors

- Family history of substance abuse
- Depression
- Other psychological comorbidities
- Age? 20 to 40 years old higher risk
- History of preadolescent sexual abuse in women (?)
Elements of Patient’s Care – musts for documentation

- 1. Assessment
- 2. Education
- 3. Treatment agreement (use agreement) and informed consent
- 4. Action plans
- 5. Outcomes (expectations/goals)
- 6. Monitoring (including PMP)
Monitoring – How and When?

- urine
- blood
- saliva

Prescription Monitoring Website
Frequency of Office Visits – face to face with a Provider

Random Pill Counts
References

* Warfield and Bajwa. Principles and Practice of Pain Medicine, second edition. 2004
References (2)