Pain Diagnostics and Interventional Care

301 Ohio River Blvd Sewickley, PA 15143 Phone Number: 412-221-7640



By the numbers:

- More than 11.5 million Americans report misusing prescription opioids in 2016
- Drug overdoses killed 63,632 Americans in 2016. Nearly two-thirds of these deaths (66%) involved a prescription or illicit opioid
- On average, 115
 Americans die every day from an opioid overdose
- About 21-29% of chronic pain patients misuse their opioid prescription
- 80% of individuals who use heroin first used prescription opioids



Benzodiazepine overdoses increase six-fold with concurrent opioid use.

Data and visuals obtained from www.CDC.gov



Opioids: Proper Use and Management

Concerns Surrounding the Use of Opioids

Opioid therapy is a widely accepted treatment for severe acute pain and certain types of chronic pain. Patients may benefit from the analgesic effects of the medication. However, an array of potentially lethal side effects is associated with opioid use. Serious associated side effects include

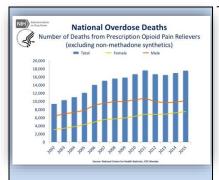
respiratory depression, hyperalgesia (an enhanced pain response), and overdose. Other side effects of opioids include constipation, tolerance, physical dependence, fatigue, dizziness, confusion, depression, and decreased testosterone. The latter may cause decreased sex drive, energy and strength.

Risk Factors for Misuse

While acknowledging the valid medical need for opioids in certain patients, clinicians must also recognize individual risk factors for abuse and diversion. Factors that indicate a potential for misuse include a history of alcohol/substance abuse, a history of mental illness and previous aberrant behavior with opioid therapy. Notable signs of misuse include overlapping prescriptions from multiple providers, the request for high daily dosages. The severe level of respiratory depression caused by mixing opioids with benzodiazepines is particularly noteworthy concern. Recent data from the National Institute on Drug Abuse (NIDA) demonstrated that from 2002-2016, deaths from benzodiazepine overdoses increased six-fold when there was

concurrent use of an opioid. Additionally, an increasingly popular remedy for chronic pain is the use of cannabis. The use of cannabis is a significant risk factor for opioid misuse. Patients who test positive for cannabis in their urine toxicology reports are more likely to have a future occurrence of an opioid related aberrancy. Concurrent use of cannabis and opioids is not recommended.

The abuse and diversion of opioids is a serious public health problem. To provide the best quality of care, it is critical for providers to understand proper prescribing of controlled substances along with appropriate dose limits and compliance testing. Additionally, patients must understand the valid concerns of the provider and understand the risks and benefits of therapy.



The number of deaths from prescription opioids 2002-2015. Males (orange) have a higher prevalence of opioid related deaths than females (yellow).

Prescribing Checklist

- ✓ Review outside notes
- ✓ Evaluate patient for risk factors
- Obtain regular urine drug screens
- ✓ Check the patient's PDMP
- Review the five A's of analgesia



Download the CDC opioid guideline app for guidelines, resources, a morphine milligram equivalent calculator, and motivational interviewing.

Regulating Opioid Prescriptions

The Centers for Disease Control and Prevention (CDC) released a review on the effectiveness and risks of opioids, which included recommendations for patients and providers regarding proper management of opioid prescribing. Primarily, the CDC recommends nonopioid therapy as the preferred treatment of chronic pain. These modalities include physical therapy, non-opioid medications, and cognitive behavioral therapy. When conservative interventions fail, opioids may be prescribed as part of a multimodal treatment plan. Clinicians should establish treatment goals with patients and consider how the medications will be discontinued if necessary. Generally, the treatment goal of opioid therapy is to reduce the patient's pain by 30-40%. To begin treatment, low dose, immediate

release opioids should be prescribed. If increasing the dose is necessary, it should be done gradually and the risk of harm should be reevaluated. Clinicians should assess the benefits and harms of continued opioid therapy with patients at least every three months and review prescription drug monitoring program data regularly for high risk combinations or dosages and the identification of multiple providers.

In cases of severe acute illness or injury, each state has guidelines for opioid prescribing. In Pennsylvania, prescriptions should be limited to the amount needed until follow-up and should not exceed seven days. Providers should not prescribe long acting opioid agents such unless the prescription is a part of a properly coordinated treatment plan.

Good Prescribing Patterns for Providers

The guidelines recommended by the CDC provide guidance for responsible and effective prescribing of opioids. Providers are encouraged to review notes from any outside providers and evaluate an individual for known risk factors. A urine drug screen should be obtained at least once every 6 months, and the patient's PDMP should be checked at each visit. The clinician should continue to assess each patient using the "Five A's of analgesia": activity, analgesia (pain score/percent relief), adverse effects, aberrant behaviors, and affect. An example of a prescribing checklist is provided in the left side

column.

When prescribing opioids, it is also recommended to provide a prescription for NARCAN® (naloxone HCl). Naloxone is used for the treatment of an opioid emergency or a possible opioid overdose with signs of breathing problems, severe sleepiness, and unresponsiveness. Since most accidental overdoses occur in a home setting, having naloxone available may help in these situations.

Upcoming Lectures

Dr. Provenzano is the Scientific Program Chair for the 22nd Annual North American Neuromodulation Society (NANS) Meeting in January of 2019. NANS is the premier meeting in the world to capture the latest advances in the science and practice of neuromodulation. His lecture topics

include advances in the field of neuromodulation and neuromodulation for disease specific conditions. He will also be lecturing in the implantable device workshop for neurosurgery residents and fellows. Over 3000 participants attend the NANS Annual Meeting.