

## Concepts In the Use and Misuse of Opioids: Drug Diversion

### Course Description:

Prescribing narcotic analgesics, specifically opioids, is not without risk. There is a multitude of factors which need to be taken into consideration when choosing to treat pain with these pharmaceutical agents, and recognizing the existence and potential for addiction and overdose is a large part of the equation. This course will update the prescriber on proper protocol and prescribing considerations for treating pain with these potentially addictive medications.

### Learning Objectives:

- 1) To update the prescriber with common indications which may warrant a narcotic analgesic, with emphasis on conditions of the eye and adjoining tissue
- 2) To facilitate an understanding of the pharmacology of these medications with respect to why they work and how they may induce dependence
- 3) To better the prescriber's recognition of patients who are addicted to narcotic medications (or those who are at a greater risk for becoming addicted)
- 4) To explain how and why overdoses take place
- 5) To convey proper protocol for addressing and intervening when a patient suffers from addiction

### Course Outline:

#### I. Introduction

##### A. The science and nature of pain

1. The body's response to insult and the trigger of pain receptors
2. The importance of experiencing pain
3. The role of endogenous opioid-like biochemicals in modulating pain
4. The science behind pain threshold and its relationship to opioids

##### B. When pain presents in or around the human eye

1. Corneal pain

- a. Corneal abrasion
  - b. Severe corneal inflammation (severe ulcer, etc.)
  - c. Corneal laceration
  - d. Corneal perforation (penetrating ocular injury)
2. Pain to adjacent tissues
    - a. Severe injury
    - b. Severe nerve pain (post-herpetic neuralgia, etc.)
3. Intraocular pain
    - a. From injury
    - b. From non-traumatic inflammation or neuralgia
4. Retrobulbar pain
    - a. Retrobulbar injury / inflammation

## II. The pharmacology of opioid analgesics

- A. Morphine is gold standard opioid analgesic
- B. Opioid analgesics bind to endogenous opioid receptors and mimic morphine

## III. Prescribing considerations

- A. Dosing considerations
  1. Adjusted / augmented based on pain threshold or other patient factors
  2. Most eye / adnexa conditions do not require longterm opioid therapy
  3. Typically q4h to q6h
  4. Commonly combined with non-narcotic analgesic
    - a. Codeine / acetaminophen

b. hydrocodone / acetaminophen

B. Contraindications

1. Pregnancy considerations
2. May cause or exacerbate respiratory depression
3. Alcoholism / history of alcoholism
4. Addiction to “painkillers” / history thereof

C. Dependence

1. Repeated intake causes diminished effect
2. More opioid needed to produce desired effect
  - a. More molecules needed at opioid receptor
3. Neurological / psychological effects / sequelae
  - a. Opioids work on central nervous system
  - b. Alter perception of pain

IV. Recognizing addiction

A. Detecting patients who shop around for opioids

B. Behavioral cues which may point to addiction

1. Patients who dictate which dosage they need
2. When signs and symptoms don't match
3. Early / frequent calls for refills
4. Symptoms of withdrawal manifest during doctor visit

V. Overdose signs / symptoms

A. Depressed respiration

B. Confusion / mood change

C. Pupillary miosis

D. Severe constipation

E. Nausea / vomiting

F. Lethargy

#### VI. Overdose Treatment

A. Medical emergency

B. May range from monitoring to emergent life support

C. Naloxone reverses chemical effect of opioids

#### VII. Intervening when addiction is present

A. Communicating with patient / family

B. Communicating with patient's primary care doctor

C. Support system is key

D. It is key to become familiar with your local resources