Opiate Addiction and Considerations for Anesthesia

James Saltanovitz
Otterbein University, saltanovitz1@otterbein.edu

Follow this and additional works at: https://digitalcommons.otterbein.edu/stu_msn

Part of the Nursing Commons

Recommended Citation
Saltanovitz, James, "Opiate Addiction and Considerations for Anesthesia" (2019). Nursing Student Class Projects (Formerly MSN). 391.
https://digitalcommons.otterbein.edu/stu_msn/391

This Project is brought to you for free and open access by the Student Research & Creative Work at Digital Commons @ Otterbein. It has been accepted for inclusion in Nursing Student Class Projects (Formerly MSN) by an authorized administrator of Digital Commons @ Otterbein. For more information, please contact Whybrew1@otterbein.edu.
Opioid Addiction and Considerations for Anesthesia

Robert Saltanovitz RN, BSN, CCRN
Otterbein University, Westerville, Ohio

Opioid Statistics in the United States

According to the Center for Disease Control (CDC), from 1999 to 2017 around 218,000 Americans have died from opioid prescription overdoses. From 1999 to 2015 the number of written opioid prescriptions increased from 5.9 to 8.1 billion. Non-opioid prescribed medications and written opioid prescriptions were five times greater in 2017 than in 1999. Prescription opioids are prescribed for moderate-to-severe pain, the elderly, injuries or surgery in conditions such as cancer. Due to the high rate of addiction, there has been a push by the government to promote awareness and promote earlier recognition for prescription and alternative options to treat pain.

Pathophysiology of Addiction

The amygdala attributes emotional value to cues. This complex brain structure also plays a crucial role in mood regulation and stress response during withdrawal. Studies have demonstrated that the volume of the amygdala is reduced in opioid abusers who can’t tolerate the withdrawal symptoms or cognitive memory task and decision making. In opioid users there is reduced tolerance due to an upregulation of dopamine receptors in the amygdala. There is increased dopaminergic neurotransmitter, yet reduction of dopamine is reduced. This leads to a hyperexcitability to pain as well as increased likelihood for patients to be pleasure seekers, that is diminished during times of stress (Sadat et al., 2018).

Signs and Symptoms of Opioid Addiction

- Physical withdrawal symptoms
  - Nausea or vomiting
- Visual disturbances
- Muscle aches
- Twitching
- Needle marks
- Piloerection
- Respiratory
- Fever

Common Myths to Avoid

1. Buprenorphine or morphine provides analgesia.
2. Opioids for anesthetics will cause relapse for patients for addiction.
3. Patients that require additional opioids for analgesia may cause dysfunction and central nervous system depression.
4. Patient-Controlled Analgesia is inadequate for opioid tolerant patients post-operatively (Coluzzi et al., 2017).

Evaluation for Preoperative Patients

Nurses and nurse anesthetists will encounter patients with known and unknown opioid use. It is essential to properly evaluate patients so that the proper measures can be taken to properly treat their pain before, during, and post-operatively while reducing the risk for surgical mortality and morbidity. Key points to consider:

1. Always consider the question: "Is my patient an opioid user or not?"
2. Always obtain details of the type of opiate, the duration, use, dose, and timing of last dose.
3. Recognize symptoms of opioid abuse and withdrawal as quickly as possible.
4. Identify population at risk.
5. Obtain complete history, including physical and diagnostic studies.
6. Consider coexisting psychiatric disorders.
7. Advise patients and assure the patient.
8. Keep in mind the fear the patient has.
9. Develop a plan for perioperative pain management (Coluzzi et al., 2017).

Considerations or Providers

It is important for anesthesia providers to remain empathic and use the situation of addiction from the patient’s point of view. Often times the patient is not feeling understood and may be confused. Often providers will experience a diaphragm with a patient’s expectation for pain management and the reality of what is available for that pain management. The current climate places many restrictions on opioid prescriptions, this can be difficult when determining the best options to adequately care for a patient’s needs. Current research shows that there is not enough care for patients who are addicted to opioids, because providers want to care for the patient, but are not properly trained to do so. There is a need to train other providers to treat patients with chronic pain. The prevalence of opioid abnormal values is reduced for opioid tolerant patients. The NIH recently granted permission of lifestyle local anesthetics that allow for a decreased pain relief to decrease opioid use post-operatively.

References


