
Medical Issues and Opioid Use Disorder

Introduction

While you may not be treating most medical complications of opioid use disorder, any comprehensive assessment of these patients should include a screening for the most common medical complications.

Common Opioid-Related Medical Issues

Transmissible viral infections

- **Hepatitis B:** Spread by contact with infected blood or semen, so sharing needles and sexual contact are both common ways of contracting it. The acute phase of the illness usually occurs within two weeks of contact and causes symptoms that may seem like the flu, such as fever, joint pain, fatigue, and sometimes jaundice. Hepatitis B can become a chronic infection, though this only occurs in 5% of adults who contract the virus. There is a vaccine to prevent hepatitis B, but unlike hepatitis C, there are no curative treatments. Patients will typically be followed by a specialist for years, with lab monitoring every six to 12 months. Patients with chronic hepatitis B will be asymptomatic for most of their lives, but about 10% will develop liver cancer or cirrhosis, which has a high mortality rate.
- **Hepatitis C:** Spread by contact with infected blood, most commonly through sharing needles. It can be transmitted through sexual contact and sharing of drug sniffing implements as well, though the incidence is low. Acute infection is mild and usually asymptomatic, but it is much more likely than hepatitis B to become a chronic infection, with 75% of patients developing chronic hepatitis C. Chronic hepatitis C is a major cause of liver cirrhosis, cancer, and eventual transplantation. However, unlike hepatitis B, there are now several treatments with a 90% or better cure rate. These are often combination pills, such as ledipasvir/sofosbuvir (Harvoni) and elbasvir/grazoprevir (Zepatier), and treatment usually lasts 12–24 weeks. There is no vaccine to prevent hepatitis C.
- **HIV:** Spread through sexual contact or contact with infected blood, typically by sharing needles. About half of patients who contract the virus develop flu-like symptoms within a month. Other patients are initially asymptomatic. There is no vaccine and no cure, though patients can live for many years with HIV while taking highly active anti-retroviral therapy (HAART). Transmission can be greatly reduced with pre- and post-exposure prophylaxis (see “Harm Reduction and Opioid Use Disorder” fact sheet).

Sequelae of intravenous (IV) use

- **Track marks:** IV use over time results in track marks, thin lines of callus-like skin that follow the course of a vein.
- **Bacterial infection:** Injection of drugs carries high risk for bacterial infection.
- **Cellulitis and skin abscess:** Exam reveals painful red, purple, or black skin, often with a collection of pus. Requires antibiotics, and some patients need hospitalization for IV antibiotics or surgical debridement. Opioids that have been adulterated with xylazine are particularly associated with dangerous soft tissue wounds (see “Xylazine” fact sheet).
- **Endocarditis:** Usually right sided. Patients will have fever, malaise, weight loss, and other nonspecific symptoms. Septic emboli to the lungs cause cough, dyspnea, and pleuritic chest pain. Heart murmur may be heard on physical exam, though not always. Definitive test is blood culture and echocardiogram. Refer to cardiology if you have any suspicion of endocarditis.
- **Osteomyelitis:** Most often in the area of the sternum. Symptoms include localized pain in the anterior chest, and exam reveals swelling of the chest or a tender mass over the sternum. Labs reveal elevated ESR and CRP. Refer to a specialist for imaging and possible biopsy if you suspect osteomyelitis.
- **Constipation:** Chronic opioid use can cause severe constipation. Many patients will have only a couple of bowel movements a week. Treat constipation with an aggressive bowel regimen, and avoid bulk-forming agents like psyllium.

Issues surrounding surgery

- Patients with chronic exposure to opioids (illicit or prescribed) typically have a high tolerance to their analgesic effects. Tolerance to respiratory suppression is usually not nearly as developed, however. Many of these patients require higher than usual doses of opioids for pain control during and immediately after surgery, but they are at high risk of respiratory suppression. Monitor these patients closely!
- Patients on buprenorphine may need to adjust their medication before a major surgery. If this is the case, collaborate closely with the anesthesia and surgical teams. The general guidance is to stop buprenorphine the day before surgery and then resume the medication on postop day 1. Adjunctive opioid analgesic medication can be used sparingly on top of buprenorphine for a short time.

Labs to Consider Upon Intake/Initial Workup

- Transmissible infection panel
 - HIV antibody
 - Hepatitis B (HBsAg, anti-HBs, anti-HBc)
 - Hepatitis C (antibody with reflex HCV RNA test)
 - Tuberculosis if history of incarceration: tuberculin skin test (PPD) or QuantiFERON
 - Syphilis if history of high-risk sexual behaviors
- Chemistries
- Complete blood count (CBC): Elevated white count can be indicative of infection
- Liver function tests
 - Transaminases (AST and ALT): Elevations are caused by leakage from damaged liver cells. Mild elevations (less than four times the upper limit of normal) are common and usually reversible with abstinence. More concerning are elevations of four or more times the upper limit of normal (usually >200 depending on the lab).
 - Synthetic function: Increased bilirubin, increased INR, and decreased albumin indicate decreased synthetic function and imply pending liver failure
- ESR and CRP if there are symptoms consistent with osteomyelitis
- EKG if there is a history of cardiac disease or the patient is on other QT-prolonging agents
- Urine toxicology: Be sure to add fentanyl, buprenorphine, and methadone separately if they are not included at your institution