You may see a patient recovering from heroin addiction in an acute pain situation (surgery or trauma). He may be undergoing treatment with naltrexone (Trexan), a long-acting form of the opioid antagonist naloxone (Narcan). Both the short-acting naloxone and the long-acting naltrexone act by binding to the opioid receptors, so opioids can’t be effective. If surgery is planned, the naltrexone should be discontinued a few days before the procedure. If a patient receiving naltrexone is in immediate need of pain relief, very high doses of opioids may be necessary. Alternative methods of pain relief (local or regional blockade and NSAIDs) should be incorporated in the pain management plan.


COMPLEX REGIONAL PAIN SYNDROME
Complex regional pain syndrome (CRPS) refers to a group of conditions previously described as causalgia, reflex sympathetic dystrophy (RSD), and other diagnoses. Complex regional pain syndrome describes various painful conditions that often follow an injury. The magnitude and duration of the pain far exceed the expected duration and often result in significantly impaired motor function. There are two categories of CRPS: type I and type II. CRPS type I, the most common type, is characterized by unexplained diffuse burning pain, usually in an extremity. RSD is categorized as CRPS type I and occurs after a relatively minor trauma. Pain is accompanied by weakness, a change in skin color and temperature relative to the other extremity, limited range of motion, hyperesthesia, hypoesthesia, edema, altered hair growth, and sweating.

Pain that worsens with movement, cutaneous stimulation, or stress often occurs after surgery or trauma to the extremity but isn’t limited to the area of surgery or trauma. CRPS type I is usually managed through a pain clinic. Currently, regional sympathetic blockade and regional intravenous (I.V.) bretylium offer promise for relief. Tricyclic antidepressants may be tried as well.

CRPS type II refers to causalgia and is more likely to develop after trauma with detectable peripheral nerve lesions. The pain is characterized as burning and hyperpathia in an extremity after partial injury to a nerve or one of its major branches.

POSTMASTECTOMY PAIN SYNDROME (PMP)
Postmastectomy pain syndrome (PMP) occurs after mastectomy with node dissection but isn’t necessarily related to the continuation of disease. Characterized by the sensation of constriction accompanied by a
burning, prickling, or numbness in the posterior arm, axilla, or chest wall, PMP is often aggravated by movement of the shoulder, resulting in a frozen shoulder from immobilization.

**FIBROMYALGIA (FIBROSITIS)**

Fibromyalgia, a chronic pain syndrome characterized by generalized musculoskeletal pain, trigger points, stiffness, fatigability, and sleep disturbances, is aggravated by stress and overexertion. Treatment consists of nonsteroidal anti-inflammatory drugs (NSAIDs), trigger point injections with local anesthetics, tricyclic antidepressants, stress reduction, and regular exercise.

**HEMIPLEGIA-ASSOCIATED SHOULDER PAIN**

This pain syndrome affects up to 80% of stroke patients. It may result from stretching of the shoulder joint due to the uncompensated pull of gravity on the impaired arm. Functional electrical stimulation of the involved shoulder muscles may prevent it.

**PAIN ASSOCIATED WITH SICKLE CELL DISEASE**

Pain experienced by patients with sickle cell disease results from venous occlusion caused by the sickle shape of the blood cells, impaired circulation to a muscle or organ, ischemia, and infarction. Acute pain may be managed with I.V. opioid analgesics administered according to a schedule or by a patient-controlled analgesia (PCA) pump and NSAIDs. Warm soaks and elevating the affected body part may help as well. Meperidine (Demerol) therapy isn’t recommended in patients with compromised renal function, nor is cold therapy. Patients with sickle cell disease may have a long history of chronic pain. Some issues related to their history include tolerance, possible long-term dependence, racial prejudice, and inadequate pain treatment.

**AIDS-RELATED PAIN**

As AIDS progresses, so do problems that produce increasing amounts of pain, such as neuropathy, esophagitis, headaches, postherpetic pain, and abdominal, back, bone, and joint pain. Pain-relief interventions are individualized and may consist of NSAIDs, long-lasting opioids, such as fentanyl patches, and topical lidocaine. Tricyclic antidepressants may provide comfort in neuropathic and postherpetic pain.

**BURN PAIN**

Possibly the most severe pain, burn pain requires accurate assessment by all health care professionals to effectively manage pain. Besides administration of I.V. opioid analgesic agents, current therapies to relieve or control pain in burn patients include debridement under general anesthesia; anxiety reduction; intervention with PCA devices, such as a handheld nitrous oxide delivery system; and cognitive techniques, particularly hypnosis.

**PAIN ASSOCIATED WITH GUILLAIN-BARRÉ SYNDROME**

A progressive, inflammatory disorder of the peripheral nervous system, Guillain-Barré syndrome is characterized by flaccid paralysis accompanied by paresthesia and pain—muscle pain and severe, unrelenting, burning pain. Complaints of severe pain may be difficult to accept in the face of the characteristic flaccid facial response, so you need to be sensitive and learn to disregard nonverbal cues that contradict the verbal report of pain. Treatment interventions include NSAIDs for muscle pain and opioids if NSAIDs are ineffective. Causalgia and neurogenic pain may be relieved by systemic or epidural opioids or, possibly, antiseizure agents or tricyclic antidepressants. To relieve the burning, some patients beg to have windows opened and clothing removed, even in cold weather, which suggests that gentle ice massage may help. Research is needed, however, to test its effectiveness.

**OPIOID TOLERANCE**

Opioid tolerance is common among patients treated for chronic pain, especially patients being treated by multiple health care providers. Opioid tolerance should be suspected if a patient (1) complains of significantly more pain than is usually associated with the condition, (2) requires unusually high doses of opioids to achieve pain relief, or (3) experiences an unusually low incidence and severity of adverse effects from opioids. Cancer patients also often develop a tolerance to opioids, requiring larger and larger doses of medication to obtain pain relief. In such cases, watch for signs of tolerance, seek additional information from the patient or family, and then obtain additional prescriptions for analgesics or an alternative intervention. In patients undergoing surgery, epidural local anesthetic agents provide excellent postoperative analgesia; be sure to rule out opioid tolerance preoperatively.