Analgesics reduce pain without eliminating feeling or sensation, as occurs with anesthetics. Choices include salicylates, acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs), and narcotics. Some of these drugs are also antipyretic, which means they reduce fever.

Salicylates

Salicylates, such as aspirin (acetylsalicylic acid), relieve mild to moderate pain and reduce inflammation and fever. Salicylates are also used to decrease inflammation in blood vessels, to improve cardiovascular flow. Aspirin has the disadvantage of causing gastrointestinal (GI) distress, and it should not be used in children with viral infections because of the danger of Reye's syndrome.

Methylsalicylate is a topical anti-inflammatory medication used to irritate the surface of the skin. This irritation increases blood flow to the area where it was applied and thus decreases pain. An example of this class is Bengay.

CRITICAL THINKING

Based on what you learned in previous chapters and your understanding of how different routes of medication administration affect absorption, why would aspirin in a powder form that you place on your tongue work more rapidly than aspirin tablets?

Acetaminophen

Acetaminophen (Tylenol) decreases pain and fever, but it has no anti-inflammatory effect. Acetaminophen is often an ingredient in combination products used to relieve pain or in products used for cold and flu symptoms such as Alka-Seltzer Plus cold medications. Because it typically does not produce severe side effects, acetaminophen is frequently combined with narcotics, such as oxycodone with acetaminophen (Percocet), to treat moderate to severe pain. Additional acetaminophen should not be ingested with these combination pain medicines as excessive acetaminophen can lead to liver damage.

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs)

NSAIDs, in the context of pain and fever relief, refer to medications such as ibuprofen (Motrin or Advil). These drugs reduce pain and swelling caused by inflammation. Fever is also reduced using this type of drug. As with acetaminophen, NSAIDs can be combined with narcotics to relieve moderate to severe pain. An example is oxycodone with ibuprofen (Combunox). Additional ibuprofen should not be used in combination with these pain medications as too much ibuprofen can lead to kidney damage.

Opioid Analgesics

Opioid analgesics are strong painkillers that suppress the CNS. They are an excellent choice when pain cannot be relieved by milder drugs. The active ingredient in most narcotics is opium, which is extracted from the poppy plant. Other opioid analgesics are obtained from synthetic or semisynthetic sources.

Patients taking narcotic medications to relieve pain must be closely monitored because of the possibility of severe side effects, particularly in large doses. An excess amount of a narcotic medication can slow respirations to dangerous levels. In this instance, the drug Narcan (naloxone) can be given to reverse opioid analgesic effects. It can also decrease blood pressure significantly as a result of peripheral vasodilation. Further drops in blood pressure occurring with changes in position lead to the risk for falls. Patients must use caution with certain activities, such as driving.

Opioid analgesics such as morphine, meperidine (Demoral), and fentanyl are the strongest. They are not routinely prescribed because of their addiction potential. Because narcotics produce euphoria, or happy feelings, they can cause physiological or psychological dependence (A Closer Look 13.1). In addition, limited amounts of medications are ordered, to force close supervision and reassessment of these patients. However, if a patient has pain that does not respond to other medications, he or she should not be denied adequate pain relief out of concern for addiction or dependence. Opioid analgesics are rarely addictive in patients who take them for relief of acute pain for a short period. Opioid analgesics can also be used for general anesthesia during surgery. As discussed in Chapter 4, opioid analgesics are classified as levels I to V controlled substances based on accepted use and addictive qualities.

Sometimes combining analgesics with alternative methods of pain relief, such as meditation, can reduce pain effectively.