

Doctors are trying a new approach to pain management after surgery, in an attempt to reduce patients' reliance on narcotic painkillers, according to *The Wall Street Journal*.

This "multimodal" approach includes cocktails of medications given to patients before, during and after surgery.

The medication is delivered orally, intravenously and through injection into the tissues and nerves around the surgical site. By avoiding giving patients heavy doses of opioids, doctors hope to prevent the risk that patients will become addicted to painkillers.

They also avoid the grogginess, nausea, hallucinations and constipation that can result from taking opioids.

Martin Clark Jr., an orthopedic surgeon at Sharon Hospital in Sharon, Connecticut, says when his patients rely entirely on narcotics, they are "drowsy and apathetic, they aren't into physical therapy and they sit in bed." In contrast, patients being treated with the new pain protocols are more able to stick with physical rehabilitation regimens to regain muscle strength and range of motion.

Patients undergoing knee replacement surgery at Canton-Potsdam Hospital in Potsdam, New York, receive medication before surgery including the anti-inflammatory Celebrex, and Lyrica, which treats nerve pain and blocks pain impulses to the central nervous system.

During surgery, patients receive anesthesia in the lower spine, as well as a sedative, intravenous Tylenol and an anti-nausea medication. The anesthesia lasts up to 24 hours after surgery. The surgeon also injects medications into the tissues around the knee, including a numbing agent, a drug to control bleeding and another anti-inflammatory agent.

Once patients are in recovery, they receive a continuous cooling pad to decrease swelling and stimulate nerve endings, which reduces pain. They receive 24 hours of intravenous Tylenol and more Celebrex and Lyrica.

Patients are given oral narcotics such as oxycodone, but they generally don't need them for more than two weeks, and often stop taking them after several days.