

5 Ways to Control Post-Op Pain

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Effective pain management will set your joint replacement program apart.

Joint replacement surgery's reputation for post-op pain can overshadow the procedure's successful outcomes and even drive potential patients away from your facility. But it doesn't have to. Perioperative planning, coordinated care and anesthetic efficiency will set your outpatient joint management program apart from inpatient recoveries. Here are 5 keys to sending patients home safely, comfortably and with pain under control after surgery.

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1 Patient education

Managing post-op pain is the linchpin of our center's outpatient total joint program. It's ingrained into every stage of the perioperative process, and making sure that the patient is aware of that pays off in a big way.

Once patients decide to undergo same-day joint replacement, we have them in for a pre-op consultation visit. Scheduling time to educate patients well in advance of their surgeries is routine, but how you structure the meetings can make a huge difference in



• **BASIC BLOCK** A peripheral nerve block is the starting point for perioperative analgesia.

patient outcomes.

During this appointment, patients should meet with each of the members of their care team — the surgeon, nurses, anesthesia provider and physical therapist. For patients, the object is to learn, step by step, what will happen during their surgery. This includes how we intend to manage their pain, both pre-emptively and responsively, mobility considerations following surgery and exercises they can do to “preha-

bilitate” themselves.

For clinicians, pain management education is also an important contributor to the success of the procedure. It lets us hit the ground running on the day of surgery, as nearly all of our instructions have been covered during the initial pre-op visit, and patients are generally more at ease when they know what to expect.

2 Seamless care

A unified, team-based approach to patient care has a positive impact on how that care is delivered. While our joint replacement program is multidisciplinary in scope, it’s also focused on the patient and their surgery.

Each member of the care team specializes in outpatient joint replacement, and our orthopedic surgeons, nurses, anesthesia providers and physical therapists are in constant communication about each case. They all participate in pain management planning for each patient, and we are consistently evaluating and improving our pain management protocols.

Ambulatory surgery centers hold a definite advantage here, because they’re able to handpick teams that routinely work together, as opposed to hospitals, where there’s a higher degree of staff rotation. The end result is a seamless experience for the patient.

Beyond the clinical team, we ask all of our joint replacement patients to identify a “coach” among their family or friends. This person should be able to accompany them to their pre-operative visit and to surgery, help them maintain their physical therapy requirements after they’re discharged, and assist with any mobility or pain management concerns in the days after the procedure. We believe that having a personal resource and advocate is particularly important for patients following outpatient joint replacement, where home recovery is convenient but pain management is crucial to rehabilitation.

In addition, we arrange for in-home nursing and physical therapy before the day of surgery, the same recovery services that patients would receive during a hospital stay. Typically the nurse and physical therapist will visit the patient once a day for a week, then scale back their services as dictated by the patient’s progress.

3 Multimodal anesthesia

Without question, your approach to anesthesia will distinguish the success of your pain management protocol — and by extension your joint replacement program — from the rest.

If your goal is to facilitate faster patient recoveries and keep post-op pain in check, a protocol that reduces opioid consumption is key. A combination of peripheral nerve blocks and peripheral nerve catheters form the backbone of our anesthesia plan for joint replacements.

For total knee arthroplasties, for example, we first place a selective

tibial block, which delivers good sensory pain relief to the back of the knee, while also minimizing the disruption of motor movement to the foot.

Next, we administer a single-shot femoral nerve block, which provides a very dense anesthetic effect to the anterior part of the thigh and knee for the duration of the procedure. Because this block tends to be effective for 12 to 18 hours, its benefits extend into the early post-operative recovery period.

Finally, we add an adductor canal block. For that, we use a peripheral nerve catheter kit in conjunction with a continuous local anesthetic infusion pump. We also give our patients a light general anesthetic, which keeps them comfortable during surgery, but doesn't interfere with their recovery times or our same-day discharge plans.

4 Pumped up recoveries

The ability of continuous local anesthetic infusion pumps to deliver highly effective motor-sparing sensory anesthesia to the knee for about 3 days has played a significant, even revolutionary, role in letting surgical facilities offer total joint replacements on an outpatient basis. Pain pumps contribute a measure of follow-through to your pain management plans.

Following surgery, the patient is connected to the pump via the peripheral nerve catheter that anesthesia placed during pre-op preparations. The pump automatically and continuously delivers a regulated flow of non-narcotic local anesthetic for precisely targeted pain relief in the days following surgery.

While the pump's effects are fairly straightforward, don't neglect patient education in the post-op stage. PACU nurses should thoroughly review how



John Hickey (Buffalo News)

• **DENSE ANESTHETIC** Single-shot femoral nerve blocks can last for 12 to 18 hours, its benefits extending into the early post-operative recovery period.

the pump works, what to expect during its operation, and how patients can interact with it to control their pain through adjusting the flow rate or delivering bolus doses if necessary.

For the first 3 days after they're discharged, patients receive daily check-in phone calls from our nursing staff, in addition to visits from the home-care nurse and physical therapist, to ensure they're progressing in their recoveries. Patients also have 24-hour phone access to their anesthesiologist during this period in the event they have any questions about their pain or our post-op pain management regimen.

5 Constant improvement

Both large and small elements of these pain management measures — from the block methods you employ, to the technology with which you implement them, to the skills of individual members of your care team — will have a huge impact on overall patient outcomes.

So don't be afraid to actively solicit patient feedback with the aim of revising and refining your program over time. Implementing an outpatient joint replacement service can be successful if you stick to the primary goals of safe, seamless patient care and effective pain management that reduces your reliance on opioids, and let the goals inform and initiate every step in the process. **OSM**



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