

Intrathecal Opioids for Post-Operative Pain Management

The Problem

A single injection of narcotic injected in the intrathecal space (spinal) preoperatively can offer 24-48 hours of post-operative pain relief. This method of narcotic delivery minimizes systemic absorption leaving the patient's motor and sensory function intact and allows for increased mobility in the earlier stages of recovery. Due to the slower onset and longer duration of narcotics delivered intrathecally, there is an increased risk for respiratory depression. Although intrathecal morphine is a well established pain modality in the initial postoperative period, it has been underutilized as an option offered to patients at BIDMC.

Aim/Goal

The goal of this work is to develop an interdisciplinary standard of care for patients receiving intrathecal opioids which will enable us to offer this modality of pain management to a greater number of patients.

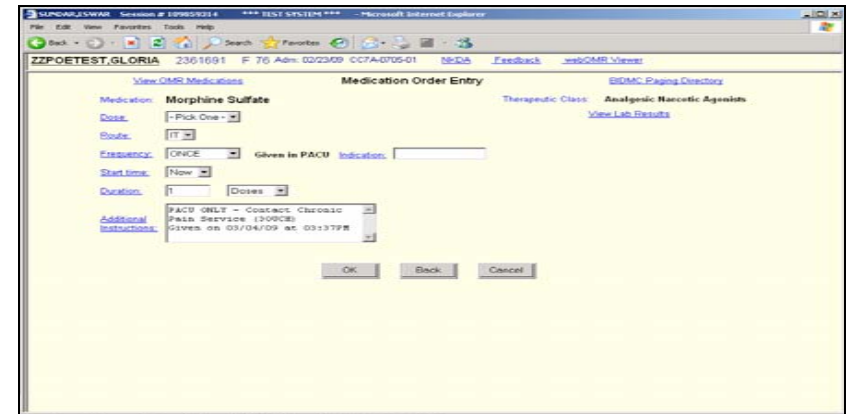
The Team

Susan Dorion RN, MSN, Mary Grzybinski RN, BSN, Kerry Carnevale RN, CNS, Elizabeth Carvelli RN, Eswar Sundar MD, Lois Hurst (IS), Norma Sandrock MD, and Christine Peeters-Asdourian, MD.

The Interventions

- Engaged the Chronic Pain Service to manage narcotic needs for the first 24 hours.
- Developed comprehensive interdisciplinary practice guidelines for managing the care of patients who receive intrathecal narcotics.
- Created a pilot to capture current state; ten patients who received intrathecal Morphine were audited to determine degree of pain relief, respiratory depression, presence of breakthrough pain, and side effects.
- Created a Provider Order Entry (POE) order set specifically for patients receiving Intrathecal Narcotics, with a built in alert to ensure that only the Acute Pain Service could write orders within the initial 24 hour period.
- Developed educational module for PACU RNs, inpatient unit RNs and anesthesia providers.
- Developed a patient hand-off communication form from PACU RN to inpatient unit "receiving" RN.
- Collected data to identify patients who would benefit from this modality of pain control and to track efficacy of intrathecal opioids and untoward responses.

Provider Order Entry Screen



The Results/Progress to Date

- Introduced an advanced pain management modality to 40 patients as compared to <5 in the prior year.
- Completed nursing education for PACU, Farr 9 and Farr 10.
- Developed multidisciplinary standard of care.

Lessons Learned

- A multidisciplinary approach with adequate safeguards, monitoring standards and a clear policy ensure that patients can safely be managed on the inpatient units.
- This is an excellent pain modality for a select group of surgical patients. Does not cause hypotension as seen in epidural pain management, and can be used on patients who are slightly anticoagulated.
- Clear communication among anesthesia providers, the surgical teams and nursing is crucial in managing safe patient care.

Next Steps/What Should Happen Next

- Continue to provide education to anesthesia providers regarding this pain management modality, patient selection and dosing for specific surgical procedures.
- Continue nursing education to evaluate clinical issues related to pain management once patients are on the inpatient units.
- Identify other surgical populations who may benefit from intrathecal narcotics.
- Continue to collect data to make positive changes.

