

## INTRATHECAL NARCOTIC USE IN OPEN SACRAL COLPOPEXY: SAFETY AND IMPACT ON POSTOPERATIVE LENGTH OF STAY

### Hypothesis / aims of study

Improved pain control leads to earlier ambulation, decreased narcotic usage, overall patient satisfaction and decreased postoperative length of stay [LOS]. LOS partly determines cost attributed to a procedure. The safety and efficacy of intrathecal narcotics [IN] has not been widely studied in the gynecologic surgery literature. [1,2]

The aim of this study was to determine whether preoperative IN use impacts the postoperative course of patients undergoing open sacral colpopexy. Our hypothesis was that the addition of intrathecal analgesia to general anesthesia would improve LOS and decrease pain without a significant increase in complications.

### Study design, materials and methods

This is a retrospective cohort study of women who underwent sacral colpopexy at a single institution. A list was generated from billing codes of all patients receiving an open sacral colpopexy with and without concomitant hysterectomy, anti-incontinence procedure, or posterior repair over 24 months. Patient demographics, procedures performed, complications, and LOS were abstracted from medical records.

### Results

A total of 50 charts were collected. 40 patients received IN and 10 did not. There were no significant clinical or demographic differences between patients receiving IN and those that did not. None of the patients without IN were discharged on day 1 after surgery. 35 (88%) of patients with IN were discharged on day 1 and the remainder on day 2. In patients who received IN: nausea occurred in 18 patients (45%). Pruritus occurred in 27 patients (68%). Respiratory depression occurred in none. No patients required treatment for post-dural puncture headaches. Hypotension was observed in 5 patients (13%) in the 30-minute period following intrathecal narcotic administration, in 10 patients (25%) in the intraoperative period, and in 20 patients (50%) in the postoperative period. None of the patients were evaluable for urinary retention: all had foley catheters til day 3 after surgery per our routine.

5 (13%) required no supplemental narcotics at anytime postoperatively. 30 (75%) used 30mg or less of supplemental oxycodone (or the equivalent of hydrocodone, morphine, or fentanyl) during their postoperative course.

### Interpretation of results

Patients who received IN had a shorter LOS than patients who did not.

Although we did not have the opportunity to assess our patients' pain directly, as this was not a prospective study, we did review the amount of supplemental narcotics that were used during the inpatient stay for patients receiving IN. The limited use of postoperative narcotics is evidence of good postoperative pain control with IN.

Opioids may contribute to impaired bowel motility and it's been suggested that IN may improve postoperative bowel function by reducing parenteral opioid use. Of the 5 patients who were not discharged on day 1, none had delayed return of bowel function. All delays were caused by nausea and intolerance of advancing diet. Since bowel function was not a factor in delayed discharge, we can't comment on the narcotic-sparing effect of IN and postoperative bowel function.

Many surgeons have been reluctant to use IN for fear of toxicities. In our cohort, the most common side effects were pruritus and nausea. They are generally associated with narcotics regardless of route of administration. It was also impossible to differentiate whether the nausea was due to IN or other factors. We are also limited by equating a symptom with the dispensing of medicine in this retrospective study. While many of our patients were noted to have hypotension post-operatively, the majority were asymptomatic.

### Concluding message

The efficacy and safety of IN administration for postoperative pain management has not been widely reported for urogynecologic surgery, in particular open sacral colpopexy. IN is an effective means of postoperative pain control following open sacral colpopexy leading to decreased LOS without added morbidity.

### References

1. Brown DR, Hofer RE, et al. Intrathecal anesthesia and recovery from radical prostatectomy. *Anesth* 2004; 100: 926-34.
2. Goodrich S, et al. Intrathecal narcotic use in gynecologic oncology: safety and impact on postoperative length of stay. *J Anesth Clin Res* 2012; 3:9

### Disclosures

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