

**PD-39. IDEAL ANESTHETIC FOR OUTPATIENT KNEE ARTHROSCOPY**

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The ideal anesthetic for outpatient knee arthroscopy would provide good anesthesia, rapid recovery, high patient satisfaction, and minimal risk or side effects. General anesthesia with propofol and nitrous oxide has been shown to provide this, and epidural 2-chlorprocaine has a similar recovery profile, however, a spinal agent which meets these criteria has not been identified. Comparison of spinal lidocaine 25 mg and 20 mcg of Fentanyl to 2-chlorprocaine epidural is undertaken to establish low dose lidocaine as an effective alternative with similar discharge times for outpatient knee arthroscopy.

41 patients undergoing outpatient knee arthroscopy, who desired regional anesthesia, were randomized by sealed envelope to receive 15-20cc of epidural 3% 2-chlorprocaine or 25mg 5% lidocaine and 20 mcg fentanyl in the subarachnoid space. Patients desiring general anesthesia were not randomized, however, data was collected as a control group. Block height, adequacy, regression, time to void, and recovery time were recorded. Follow-up phone calls were made post-operatively using a standard questionnaire.

Average block height was T7 for both epidural and spinal groups. There were 2 patients in the spinal group and one in the epidural group with inadequate anesthesia. Average time from admission to PACU phase 1 to readiness for discharge from the outpatient surgical center was: 88.4 min for the epidural group, 93.8 min for the general anesthetic group, and 87.0 min. for the spinal group. Time from injection of local anesthetic to resolution of nerve blockade averaged 113.5 min. for those patients who received epidural anesthesia and 112.8 for those who received a spinal. At 24 hour follow-up, the incidence of symptoms consistent with the syndrome of transient neurologic symptoms(TNS) was one in 23 patients receiving lidocaine spinal anesthesia.

We conclude that, for outpatient knee arthroscopy, spinal anesthesia with 25mg lidocaine and 20 mcg fentanyl provides adequate anesthesia with discharge times similar to epidural 2-chlorprocaine and propofol general anesthesia. The incidence of TNS with this dose of lidocaine appears to be less than 5%.

*Ben-David B, Maryanovsky M, Gurevitch A, et al. A Comparison of Minidose Lidocaine-Fentanyl and Conventional-Dose Lidocaine Spinal Anesthesia. Anesth Analg 2000;91:865-70.*

*Mulroy M, Larkin K, Hodgson P, et al. A Comparison of Spinal, Epidural, and General Anesthesia for Outpatient Knee Arthroscopy. Anesth Analg 2000;91:860-64.*

	Average discharge time(min)	Average time to block resolution(min)	Block failure	TNS incidence
Propofol GA (n=15)	93.8	NA	NA	NA
3-chlorprocaine epidural (n=18)	88.4	113.5	2	NA
Lidocaine spinal (n=23)	87.0	112.8	1	1