

USE OF KETAMINE DURING ANESTHESIA IN ADULT PATIENTS

Primary Investigator: Doris Winkle BSN RN

Hendricks Regional Health, Danville, Indiana

Co-Investigators: Lisa Coffman BSN RN, Roxanne Neff BSN RN, Melodie Richardson BSN RN,
Heather Wolfenberger BSN RN

Identification of the Problem: Post anesthesia care unit (PACU) nurses expressed concern about patients being restless/agitated upon awakening after receiving Ketamine intraoperatively. Anesthesia providers support the use of Ketamine stating reduction in the overall need for opioid pain medications and decreased length of stay in the PACU.

Purpose of the Study: Does the administration of Ketamine for laparoscopic abdominal procedures in adults aged 18-60 reduce the amount of opioids needed in the operating room and PACU (combined total) and decrease the length of stay in the PACU?

Methodology: Chart audits were performed on a convenience sample of sixty patients who had undergone laparoscopic abdominal surgery. Thirty of these patients received Ketamine during surgery, the remaining thirty did not.

Results: Audits revealed the average PACU length of stay for the Ketamine group was 60.3 minutes; the non-Ketamine group was 54.9 minutes. The average Hydromorphone Equivalent opioid used in the Ketamine group was 2.28 mg, the non-Ketamine group was 2.87 mg. Restlessness/agitation in PACU in the Ketamine group was 16.7%, and the non-Ketamine group was 6.7%.

Discussion: The results of our study supports the anesthesia providers' claim of reduced need for narcotics. The length of stay in the PACU was increased, not decreased. An increase in agitation was seen in the Ketamine group.

Conclusion: While the use of Ketamine decreased the amount of opioid, it increased the length of stay and frequency of restlessness/agitation in PACU. Patients who have received Ketamine should be monitored closely for restlessness/agitation during emergence from anesthesia. Anticipation of restlessness/agitation upon emergence will allow nurses to be prepared for the special needs of these patients.

Implications for perianesthesia nurses and future research: Perianesthesia nurses should be aware of the potential for agitation during emergence in patients who have received Ketamine. Nurses can anticipate the need for additional assistance and will provide a safer environment for both patient and the nurse. Research including the effect of the dosage of Ketamine may be useful.