

Applying ERAS Concepts For Patients Undergoing Same Day Lap Chole At Kaiser Vallejo PACU

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Background: Presently, our health system facilities are implementing the Enhanced Recovery after Surgery (ERAS) protocols in all inpatient surgical areas, i.e., feeding the patient sooner, getting the patient out of bed earlier, giving oral post op medication, and adding non opioids for pain control. ERAS protocol had not been fully implemented in the post operative services (PACU). It was hypothesized that ERAS application would decrease length of stay (LOS) in PACU for selected outpatient surgery.

Objectives: Aims were to compare pre-ERAS and post-ERAS project discharge times for 130 patients (65 pre and 65 post) undergoing laparoscopic cholecystectomy (lap-chole), and to assess patient satisfaction with new process upon follow-up phone call after implementation.

Process: Nursing created an IRB exempt audit tool to assess medical records for 26 variables (personnel, body mass index (BMI), American Society of Anesthesiologists Physical Status Classification System (ASA) score, pre-op, intra-op, and post-op medications, oral post-op medications, preventive anti-nausea medications, discharge without prior voiding order, early oral fluids, early up in chair) related to LOS for patients undergoing lap-chole.

Statement of Success: Comparison of pre-intervention and post-data shows mean LOS reduction from pre-ERAS LOS of 3.2 hours and a post-intervention LOS of 1.7 hours. Using ERAS concepts with patients showed less use of IV opioids, oral pain medication use increased by 5-fold, and IV Reglan administration increased to prevent nausea. Patients receiving PO fluids after surgery within 90 minutes of arrival to PACU doubled. Patients who got out of bed within the first 90 minutes after surgery increased by 7-fold, and fewer patients had orders requiring them to void prior to discharge. Phone call responses from patients report 89% satisfaction with shortened process and 20% decrease of pain at home. According to the national cost/minute in the OR, we estimated that our study saved our hospital anywhere from \$53k-\$195k amongst the 65 post-ERAS patients, due to quicker OR turn-around time.

Implications: Seeing as our ERAS study was quite successful for patients undergoing a lap chole, we feel that we could implement this process with other same day surgeries in our department using the same concepts, therefor decreasing length of stay, increasing patient satisfaction, and decreasing hospital costs.