

[OS2-96] Single Shot Thoracic Epidural: An Aid to Earlier Discharge for Pediatric Laparoscopic Cholecystectomy

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Purpose: As laparoscopic cholecystectomies (LC) become more common in the pediatric population, it is important to optimize surgical anesthesia and post-operative pain management in this growing patient population. SSTE has been utilized in the adult LC population(1). The purpose of this study is to evaluate if same-day discharge (SDD) is possible for pediatric patients undergoing elective LC. We hypothesize that the adjunct of a single shot thoracic epidural (SSTE) performed under general anesthesia will allow for decrease length of stay (LOS) for pediatric LC patients when compared to general anesthetic with standard analgesic regimen.

Method: After IRB approval, a retrospective review was conducted to examine perioperative outcomes from 2007 to 2012 for ASA 1-3 pediatric patients under 18 years old undergoing elective LC at our institution. Patients with acute cholecystitis, cholangitis, pancreatitis, sickle cell anemia, and history of pediatric cancers were excluded. Age-matched LC patients during this study period receiving general anesthesia with standard post-op analgesia regimen were used for comparison. The primary outcomes investigated include same-day discharge and post-operative LOS. Incidence of emergency department visits and readmissions within 48 hours after operative discharge were analyzed. Statistical analyses were conducted using SAS Software version 9.1.3 (SAS Institute Inc., Cary NC, USA). Statistical significance was considered when p-value <0.05.

Results: 143 patients underwent LC during this period. 29 patients had SSTE that met inclusion criteria for this analysis. Although SDD was achieved more often in the SSTE group than Control, it was not statistically significant. When analyzing the LOS, the SSTE group was statistically significantly lower. Only one non-SSTE patient required readmission due to retained CBD stone.

Conclusion: Ambulatory LC can be safely performed in the pediatric setting. We believe SSTE improves peri-operative pain control in the pediatric LC population which facilitates SDD and decrease LOS.

1) Nishikawa K, Kimura S, Shimodate Y, Igarashi M, Namiki A. A comparison of intravenous-based and epidural-based techniques for anesthesia and postoperative analgesia in elderly patients undergoing laparoscopic cholecystectomy. *J Anesth.* 2007; 21(1):1-6. Epub 2007 Jan 30

Laparoscopic Cholecystectomy	No.	Same Day Discharge [@] No. (%)	Length of Stay* Mean \pm SD (hours)	Post-op ED Visits, w/in 48 hrs, No.	Re- admission
No SSTE	29	13 (44.8%)	22.6 \pm 14.6	2	1
With SSTE	29	18 (62.1%)	14.8 \pm 13.2	3	0
		p=0.1, Chi-Square	p<0.05, T-test		