Introduction

• Pediatric patients undergoing tympanomastoid (TM) surgeries and cochlear implant surgeries are at risk for developing postoperative nausea and vomiting (PONV), which can be exacerbated by the use of opioids.

• Suresh (1) investigated the use of greater auricular nerve block for pediatric TM surgeries and found a decreased incidence of PONV in the blocked group, but no significant changes in PACU opioid requirements.

• A superficial cervical plexus block (SCPB) provides anesthesia of the anterior and posterior ear as well as the lateral neck.

Methods

• Forty of the most recent TM and cochlear surgery cases were retrospectively identified using the electronic medical record; 20 patients received a SCPB (SCPB group) and 20 patients did not (NB group).

• Primary outcome measures were total intraoperative and PACU opioid use in IV morphine equivalents (mcg/kg). Secondary outcome measures were maximum pain score in PACU, incidence of PACU rescue antemetic use and PACU emesis, and time to discharge from PACU.

See Table 1

Results

• At our institution, it has become common to do a unilateral ultrasound guided SCPB for TM and cochlear surgeries to provide analgesia and to decrease PONV.

• We hypothesized that SCPBs would decrease both intraoperative and postoperative narcotic use.

• See Table 2, Graph 1

• Average intraoperative morphine equivalents were significantly lower in the SCPB compared to NB group. PACU IV morphine equivalents were lower in the SCPB group but not statistically significant.

• There was minimal PONV in both groups.

• The SCPB group had a lower average pain score and a slightly faster time to discharge compared to the NB group but the values were not statistically significant.

Conclusions

• There was 50% decrease in intraoperative opioid requirements in the SCPB group, which was statistically significant.

• Our data appear to support our hypothesis that SCPB would decrease intraoperative opioid use. There was no significant difference in postoperative opioid use.

• The use of SCPB for pediatric ENT surgeries should be further explored.

References