Children with autism spectrum disorder (ASD) present commonly in the perioperative setting. However, little is known about their perioperative experiences. Additionally, there is no consensus on preoperative characteristics that may be associated with premedication requirements. Patients with ASD may have previously been observed to have different pain sensitivity. However, their perioperative pain medication requirements have not been studied.

OBJECTIVES

1. To better understand perioperative experiences of children with ASD.  
2. Primary goal: compare postoperative analgesic requirements, time in PACU, and admission rates.  
3. Secondary goal: compare premedication requirements or other variables for the multivariable models (p< .15).

METHODS

Single center, retrospective cohort study comparing two groups of patients between the ages of 1-21 years who underwent elective tonsillectomy. 

ASD Group

- Diagnosis of ASD
- Elective tonsillectomy in 2015

Non-ASD (Control Group)

- ASA 1
- Elective tonsillectomy in 2015

Patients were matched for age on initial data collection, but after all exclusion criteria were applied, there was some variability in the ages between groups.  

Exclusion criteria:

- Severe OA/Morbid Obesity

Data:

- Demographics: Age, Gender
- Preoperative sedation
- Preoperative medication requirements or other variables for the multivariable models (p< .15)

Statistical analysis:

- Bivariate analyses of each characteristic and each postoperative scheduled analgesic requirements, time in PACU, and admission rates.  

RESULTS

There were no major differences in the perioperative experiences of ASD vs non-ASD patients, except for the following:  

- Youths with ASD have higher rates of premedications and postoperative scheduled admissions.  
- Although PACU times were not different between the two groups, it is prudent to note that ketamine and pre-existing psychological disorders can contribute to increased PACU time.  
- Attention should be paid to children with ASD in regards to their postdischarge experience.

FUTURE DIRECTIONS

- Assessment of specific behaviors or characteristics that may help predict preoperative medication requirements or influence outcome.  
- Further assess pain medication requirements in children with ASD, to determine whether children with ASD have different pain threshold and whether they require different dosage of pain medications than non-ASD patients.  
- Prospectively evaluate the postdischarge experience of children with ASD.

REFERENCES