CONCLUSION
In this study, perioperative infiltration of tramadol or ketamin on its own is not effective on pain relief after tonsillectomy. Additional studies, with more patients should be necessary for further conclusion.

Introduction
Adenotonsillectomy (AT) is one of the most common procedures in otolaryngology. The odynophagia and dysphagia are common after surgery, decreasing oral intake in addition to the discomfort caused by the pain. Thus, adequate analgesia could improve recovery and rehabilitation, reducing the length of stay. There is still no consensus on the best way to avoid pain in the postoperative period. Literature data differ on the effectiveness of peritonsillar medication infiltration in post-operative pain.

Objective
To compare the effects of peritonsillar infiltration of tramadol, ketamin and placebo on post tonsillectomy pain in children.

Methods
This is a prospective randomized double-blinded placebo controlled study. Patients who needed tonsillectomy and/or adenotonsillectomy were selected. Inclusion criteria:

• Age from three to thirteen years old
• ASA I-II criteria were included
• Both gender

Exclusion criteria:
• Cerebral palsy, genetic syndrome, chronic use of medication, obesity

Patients were randomly divided into three groups: Tramadol (2mg/kg), Ketamin (0.5 mg/kg) and Placebo (saline solution). After anesthesia induction and before starting the surgery, 3 cc total volume was injected into the peritonsillar space in two different placas as showed in figure one.

Primary outcomes were postoperative pain scores recorded at 2, 6, 12 and 24 hours postoperatively. Secondary outcomes included postoperative nausea and vomiting (PONV), time to first oral intake, time to the first administration of analgesics and total consumption of analgesics. Oral ibuprofen or paracetamol were given to the patients by the caregivers as needed. Parenteral analgesics were given only when asked by the caregivers.

Results
A total of 38 patients, mean age of 8 ± 3 years and 53% male were evaluated. Patients had the same postoperative pain scores at hour 2 (p=0.74), hour 6 (p=0.87), hour 12 (P=0.9) and 24 hours after surgery. Patients presented the same PONV rates (P=0.68), and equal amounts of analgesics were consumed up to 24 hours (p=0.75) postoperatively. Intravenous analgesics were not required by any patient. The two groups also had the same time until first oral intake, recovery time and time to the first analgesic request.

Table 1: pain scores at hour 2, 6, 12 and 24

<table>
<thead>
<tr>
<th>Pain scores (Mean ±SD)</th>
<th>Tramadol</th>
<th>Ketamin</th>
<th>Placebo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hour 2*</td>
<td>7.2 ± 1</td>
<td>7.6 ± 1</td>
<td>8 ± 1</td>
</tr>
<tr>
<td>Hour 6*</td>
<td>6.4 ± 1</td>
<td>6.3 ± 2</td>
<td>6.6 ± 1</td>
</tr>
<tr>
<td>Hour 12*</td>
<td>5.3 ± 2</td>
<td>5.7 ± 1</td>
<td>5.6 ± 1</td>
</tr>
<tr>
<td>Hour 24*</td>
<td>4.4 ± 1</td>
<td>4.3 ± 1</td>
<td>6.7 ± 2</td>
</tr>
</tbody>
</table>

Student t-test. *P-value > 0.05

We are trying to provide hope and care to help every child in our country.