Patients receiving dexmedetomidine were less likely to have ED and had lower FLACC scores on arrival to PACU and 5 minutes after surgery. The incidence of ED in the intervention group was 2.9 times (95% CI: 1.7-4.9) that of the patients in the control group, with p value less than 0.0001. Adjusted by GA Type, patients in the treatment group still have significantly longer length of stay than those in the control group (p < 0.0001).

Table 2. The association of primary and secondary outcomes with dexmedetomidine.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>intervention (n=248)</th>
<th>control (n=245)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length of stay (minutes)</td>
<td>188 ± 82</td>
<td>190 ± 82</td>
<td>0.052</td>
</tr>
<tr>
<td>FLACC (0-22)</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>FLACC (0-22) at arrival (0-5)</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>FLACC (0-22) at 5 minutes</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>

ED = emergence delirium

Dexmedetomidine for the prevention of emergence delirium in children undergoing adenotonsillectomy

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ABSTRACT

OBJECTIVE

RESULTS

DISCUSSION AND CONCLUSION

BACKGROUND

Adenotonsillectomy patients have a high incidence of ED

Typical agents used to treat ED may cause respiratory depression, particularly with repeat dosing

High incidence of OSA in this population may make these drugs unsuitable

Dexmedetomidine is a centrally-acting α-1 agonist with sedating effects that preserves respiratory function

METHODS

Prospective review of 385 patients aged 12 months to 18 years, ASA Physical Status 1 and 2, who underwent adenotonsillectomy at Yale-New Haven Children's Hospital between August 2011 and March 2012

Control group includes patients who did not receive dexmedetomidine

Intervention group includes patients who received bolus of dexmedetomidine

Primary outcome: Incidence of ED

Secondary outcomes: time to first analgesic dose, pain (FLACC scores), incidence of PONV, and length of PACU stay

All the statistical analyses were performed using SAS software, v9.3 (Cary, NC). A p-value of less than 0.05 was considered to indicate statistical significance.