## **Abstract**

Aim: The aim of the study was to evaluate the differences in postoperative pain, nausea and time of discharge in children 3-12 years old after undergoing Tonsillectomy (TE) or Tonsillotomy (TT) at the post anaesthetic care unit (PACU), children's ward and at home. **Background:** TE involves risk of bleeding, severe postoperative pain and nausea. TT is a less invasive method with lower risk of bleeding and postoperative pain and nausea according to performed studies. Method: A prospective, comparative follow-up study design. Eightyseven children from December 2008 until April 2009 in the ages 3-12 undergoing TE or TT participated. Visual analogue scale (VAS) was used for children's pain and nausea assessments. **Result/Findings:** Significantly fewer children operated on by the TT assessed postoperative pain  $\geq 3$  according to the VAS than children operated on by the TE in both the PACU and the children's ward. A significant difference of postoperative nausea was only present during the care at the PACU and children's ward with fewer TT children that assessed nausea  $VAS \ge 3$ . The time of postoperative care was shorter among the TT children in both the PACU and the children's ward. Postoperative pain and pain related difficulties in eating after discharge was significantly more present among the TE children compared to the TT children. Conclusion: The results of our study indicated that TT is a more favourable alternative than TE in children.