

Tonsils with a Tune, Recovering with Rhythm:

The Effects of Music Medicine on Pediatric Adenotonsillectomy Postoperative Pain and Anxiety

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BACKGROUND

- Pain and anxiety in pediatric adenotonsillectomies (T&A) are often difficult to manage.
- Increased anxiety, inability to communicate, altered sensorium, and increased fears compound pain.
- Music is an adjunct therapy used to treat T&A pain and anxiety.

PURPOSE

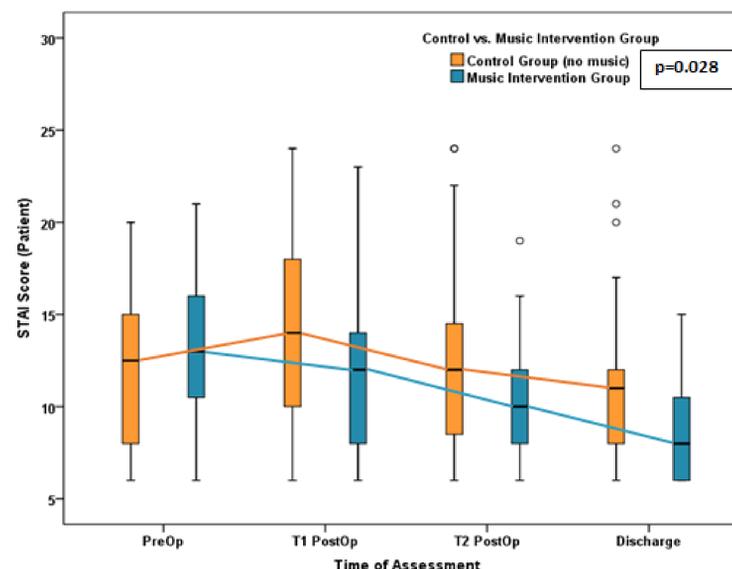
- Evaluate the efficacy of music on pediatric T&A patient's perceived anxiety, pain, opioid analgesic use, and satisfaction of surgical experience.

METHODS

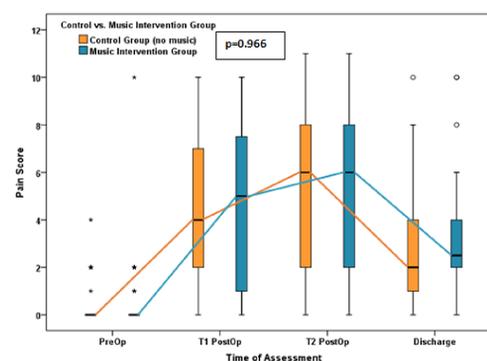
- Sample: T&A patients aged 7-18
- 80 patients randomized to Music Medicine (MM) or Control group.
- Intervention. MM patients listened to music of their choice preoperatively and postoperatively.
- Control patients never listened to music.
- Outcomes. Pain & anxiety measured using analog numerical scales (FLACC, FACES, Children's Numerical) and short STAI.
- Measured pre- and postoperatively.
- Opioid requirement & LOS obtained from EHR
- Patient' & caregiver's satisfaction obtained at discharge

RESULTS

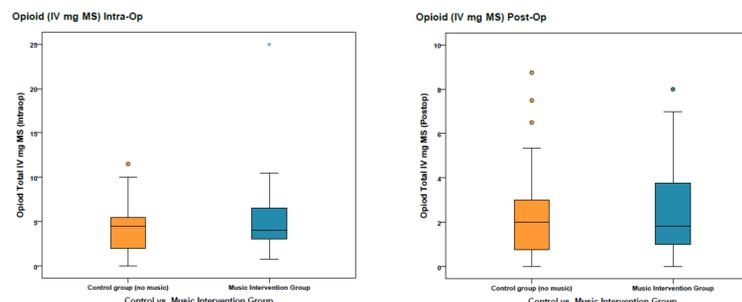
Perioperative Anxiety Scores: Control VS Music Group



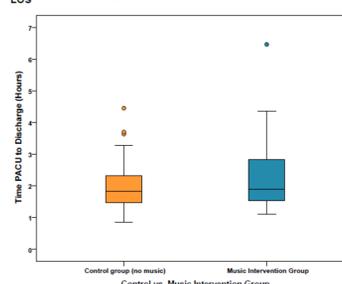
Perioperative Pain Scores: Control VS Music Group



Intraoperative & Postoperative Narcotic Consumption: Control VS Music Group



Length of Stay: Control VS Music Group



DISCUSSION

- **Music decreased anxiety** (p.028), this intervention was feasible and ease of use tested
- **Pain scores** were no different between groups, perhaps due to range of ages included and inverse relationship between age and pain
- Median **Intraoperative Narcotic Consumption** is lower in Music Intervention Group (4.0) than in Control Group (4.5), but the difference is not statistically significant, $p = 0.513$.
- Variance in **Postoperative Narcotic Consumption** is greater than in Intraoperative period. The median is not statistically significant, $p = 0.767$.
- No differences in **Length of Stay** between groups

LIMITATIONS

- Pain & Length of Stay are multifactorial.
- Data collection is complicated by production pressure, amount of nurses assisting in the study.
- Variations in nursing practice in pain management
- Future covariate analysis will include demographics of the music and control groups, including patient age and preoperative anxiety.

CONCLUSIONS

- The passive listening to music **decreases** postoperative anxiety in pediatric T&A patients.
- **89.2%** of patients that listened to music enjoyed it.
- **86.5%** of patients think music helps them feel calm.
- **80%** stated that music made their stay better.
- Music is inexpensive, convenient, & easy to administer and can improve patient satisfaction & patient anxiety.