



12-2018

# Opioid-Prescribing Practices for Post-Operative Patients in Otolaryngology: A Multiphasic Quality Improvement Project in a Single Large Institution

Zachary Gandee

*Thomas Jefferson University, zachary.gandee@jefferson.edu*

Sophia Dang

*Thomas Jefferson University, sophia.dang@jefferson.edu*


Alexander N. Duffy

*Thomas Jefferson University, Alexander.Duffy@jefferson.edu*

Jonathan C. Li

*Thomas Jefferson University, Jonathan.Li@jefferson.edu*

Tanvi Rana

*Thomas Jefferson University, tanvi.rana@jefferson.edu**See next page for additional authors*[Let us know how access to this document benefits you](#)Follow this and additional works at: [https://jdc.jefferson.edu/si\\_phr\\_2021\\_phase1](https://jdc.jefferson.edu/si_phr_2021_phase1) Part of the [Medical Education Commons](#), [Otolaryngology Commons](#), [Public Health Commons](#), and the [Surgery Commons](#)

## Recommended Citation

Gandee, Zachary; Dang, Sophia; Duffy, Alexander N.; Li, Jonathan C.; Rana, Tanvi; Gunville, Brittany; Zhan, Tingting; Cottrill, Elizabeth; and Cognetti, David, "Opioid-Prescribing Practices for Post-Operative Patients in Otolaryngology: A Multiphasic Quality Improvement Project in a Single Large Institution" (2018). SKMC JeffMD Scholarly Inquiry, Phase 1, Project 1.

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's [Center for Teaching and Learning \(CTL\)](#). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Phase 1 by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: [JeffersonDigitalCommons@jefferson.edu](mailto:JeffersonDigitalCommons@jefferson.edu).

---

**Authors**

Zachary Gandee; Sophia Dang; Alexander N. Duffy; Jonathan C. Li; Tanvi Rana; Brittany Gunville; Tingting Zhan; Elizabeth Cottrill, MD; and David Cognetti, MD

Zachary Gandee  
Abstract Submission  
PHR Track

**Objectives:**

In otolaryngology, postoperative pain management lacks evidence-based guidelines. We investigated opioid prescription and consumption for common procedures to develop prescribing guidelines at our institution.

**Study Design:**

Prospective, survey study.

**Methods:**

Patients who underwent surgery between July and September were given surveys upon discharge and at first follow-up visit. We assessed opioid usage and pain using the visual analog scale and opioid consumption throughout the postoperative period. Opioid prescriptions were converted to a standardized unit of 5 mg Oxycodone pills for reporting. Four procedures (transoral robotic surgery resection [TORS], sialendoscopy, parathyroidectomy/thyroidectomy, and parotidectomy) were selected for isolated analysis.

**Results:**

Of the 80 surveys that met criteria for inclusion for analysis, a total of 1,954.0 pills were prescribed, with 300.3 pills (15.4%) reported having been used by patients, leaving 1,653.7 pills (84.5%) unused. TORS (n=12) average pills used:  $4.9 \pm 5.9$  (95% CI: 1.6-8.3); total % pills unused: 89.3%. Sialendoscopy (n=13) average pills used:  $4.2 \pm 5.1$  (95% CI: 1.1-7.4); total % pills unused: 72.5%. Parathyroidectomy/thyroidectomy (n=22) average pills used:  $3.1 \pm 4.4$  (95% CI: 1.7-5.5); total % pills unused: 79.2%. Parotidectomy (n=12) average pills used:  $1.3 \pm 2.5$  (95% CI: 0.7-4.3); total % pills unused: 94.7%.

**Conclusions:**

At our institution, opioids for ((postoperative otolaryngology)) patients' pain management in otolaryngologic procedures were prescribed in excess with 84.5% reported as unused. Procedure-specific opioid diversion pool ranged from 72.5%-94.7%. Our findings provide a foundation for procedure-specific evidence-based opioid prescription guidelines.