

## Scientific Abstracts from the American College of Oral and Maxillofacial Surgeons 40<sup>th</sup> Annual Scientific Conference & Exhibition

### April 7-9, 2019, Santa Fe Community Convention Center, NM

This meeting of the American College of Oral and Maxillofacial Surgeons (ACOMS) took place on April 7–9, 2019, at the Santa Fe Community Convention Center, Santa Fe, New Mexico. We extend a special thank you to the scientific co-chairs for the meeting: Dr. Jeffrey Bennett and Dr. Deepak Krishnan.

The meeting was dedicated to Dr. Steven A. Guttenberg. Dr. Felice O’Ryan received the ACOMS W. Harry Archer Award and presented the Kurt H. Thoma Memorial Lecture. Vice Admiral Jerome M. Adams, the United States Surgeon General, delivered the Keynote Address.

All attendees were invited to submit scientific abstracts for presentation at the conference in poster and oral sessions. Outstanding abstracts from OMS residents were entered in the Resident Abstract Competition and were eligible for cash prizes.

### We are pleased to announce the winners of the Resident Abstract Competition:

First Place – Outstanding Oral Scientific Abstract  
*A multimodal analgesic protocol reduced opioid use/misuse after third molar surgery*

Presented by: Matthew Pham, DMD, MD

Co-Authors: Barry Kendell, DDS; Glenn Reside, DDS; Ceib Phillips, PhD, MPH; Raymond White, Jr., DDS, PhD

University of North Carolina

Second Place – Outstanding Oral Scientific Abstract  
*Do hybrid arch bar screws pose a risk to the dentition?*

Presented by: Danielle Wilt, DMD, MD

Co-Authors: Chris Kim, DMD, MSE; Dane St. John, DMD, MD

Louisiana State University

Third Place – Outstanding Scientific Poster  
*The utilization of in-office 3-D printed anatomic models to assist in reconstruction of orbital trauma*

Presented by: Tarik Elmohd, DMD

Co-Author: Ravi Agarwal, DDS

Washington Hospital Center

**A MULTIMODAL ANALGESIC PROTOCOL REDUCED OPIOID USE/MISUSE AFTER THIRD MOLAR SURGERY** MATTHEW PHAM, BARRY KENDELL, GLENN RESIDE, CEIB PHILLIPS and RAYMOND WHITE, Jr., University of North Carolina, Chapel Hill, NC, USA

**Objective:** This institutional review board–approved prospective study was designed to assess the number of opioid doses available to patients from filled prescriptions (Rx) and the opioid doses taken and left over after adoption of a multimodal analgesic protocol to manage pain after surgery in 2018.

**Study Design:** The inclusion criteria were (1) American Society of Anesthesiologists risk classification I/II, (2) age 18 to 35 years, and (3) at least 2 lower third molars removed. The exclusion criterion was treatment for opioid addiction/abuse. All enrolled, consented subject-patients were treated with the multimodal analgesic protocol. In addition, subject-patients were given 2 Rx for 4 doses of hydrocodone 5 mg or acetaminophen 325 mg each: one Rx dated to be filled on the day of surgery, one Rx dated to be filled on any subsequent day; both Rx could be filled at the patient’s discretion. Data were derived from an encounter form completed by the patient at surgery; a 14-day diary by the patient, which tracked opioid drugs taken; and the Rx filled as recorded in the North Carolina RxSentry Prescription Drug Monitoring Program. The primary outcome variable was the number of opioid doses filled by Rx for each subject-patient. The primary predictor variable was the multimodal analgesic protocol. Descriptive statistics were used.

**Results:** Data from 50 patients were analyzed. Of these patients, 32 (64%) were females. Median age was 22 years (interquartile range [IQR] 19–26 years). Twenty-nine (58%) subject-patients filled no Rx, 9 filled 1 Rx (18%), 12 filled 2 Rx (24%). Within the group that filled 1 Rx, 23 left-over doses out of 36 doses (64%) were not consumed. Within the group that filled 2 Rx, 36 left-over doses out of 96 doses (38%) were not consumed.

**Conclusions:** Outcomes suggest that implementation of a multimodal analgesic protocol with third molar surgery may be effective in reducing use and misuse of opioid drugs.

**DO HYBRID ARCH BAR SCREWS POSE A RISK TO THE DENTITION?** DANIELLE WILT, CHRIS KIM and DANE ST. JOHN, Louisiana State University, Baton Rouge, LA, USA

**Objective:** Hybrid arch bars have become popular alternatives to traditional Erich arch bars for use in craniomaxillofacial surgery. They offer the benefit of decreased time for application, reduced risk of sharps exposure to healthcare personnel, and decreased risk of compromised periodontal health. However, it has not been established if they pose a significant risk to the dentition. Damage to the teeth, such as violation of the pulpal canal or root fracture, can lead to clinically significant sequelae. The purpose of the study was to examine if the screws contact or violate the tooth structure during placement.

**Study Design:** A retrospective radiographic review of 50 patients treated with Stryker SMARTLock Hybrid Maxillo-mandibular fixation system at University Medical Center Hospital in New Orleans, from January 2018 to August 2018, was conducted. Postoperative axial slices of computed tomography