



Canadian Society of Otolaryngology-Head and Neck Surgery

**74<sup>th</sup> ANNUAL MEETING (Virtual)  
September 26 – November 14, 2020**

**“Quality and Excellence in Otolaryngology-Head and Neck Surgery”**

**Tuesday, September 29 - GENERAL OHNS PAPERS**

09:05 p.m. - 09:10 p.m. ***Diagnosis and Management of Odontogenic Mediastinitis: A Systematic Review*** - K. Zhou, M. Levin, S. Banglawala, Hamilton, ON

**Learning Objectives:**

1) By the end of the session the audience will be able to describe the utility of FNA biopsy sampled ddPCR detection of oncogenic proteins in supplementing existing diagnostic workup of unknown primary malignancies 2) By the end of the session the audience will be able to list the benefits of ddPCR in detecting high risk oncogenic proteins for oropharyngeal cancer 3) By the end of the session the audience will be able to highlight the limitations of current FNA biopsy immunohistochemistry p16 staining in predicting HPV status of final surgical pathology within treatment of oropharyngeal cancer

**Abstract:**

**Introduction:** Odontogenic descending necrotizing mediastinitis (DNM) is a rare but sometimes fatal complication of teeth infections. The mortality rate is stagnated at 40% and there is no consensus on workup and management. **Methods:** A systematic review of the Ovid Medline, EMBASE Classic, and Pubmed databases was conducted using PRISMA guidelines. **Results:** Our search identified 226 articles. Final inclusion consisted of 60 studies with a total of 204 individual patient cases. Most patients were male (80.4%) with a mean age of  $47.64 \pm 15.96$  years old. Patients primarily presented with edema (57.7%), fever (42.3%), trismus (37.2%), dyspnea, (26.9%), dysphagia (26.9%). Common radiologic findings were abscesses or fluid collection in the mediastinum (53.1%), air in the soft tissues (50.0%), pleural effusion or empyema (37.5%), mediastinal widening (32.8%), and pericardial effusion (7.8%). Patients were treated with intravenous antibiotics and a variety of surgical techniques such as cervicotomy only (51.2%), thoracotomy only (15.9%), cervicotomy and chest tube (3.5%). The mortality rate was 14.2% with a mean length of hospital stay of  $30.1 \pm 20.2$  days. **Conclusion:** This systematic review reports and analyzes epidemiological, clinical, and treatment-related data regarding patients with odontogenic DNM. Further research is needed to promote the implementation of such data into clinical practice, with the potential to reduce the associated mortality rate.

09:10 p.m. - 09:15 p.m. ***E-Cigarettes: A Comprehensive Reference Guide for the Canadian Otolaryngologist-Head & Neck Surgeon*** - M. Biskup, S.M. Taylor, Halifax, NS, J. Franklin, Kingston, ON

**Learning Objectives:**

1) To provide a thorough background of e-cigarettes, including available offerings, how they work, and their introduction to the Canadian market; 2) To discuss the potential dangers of using e-cigarettes and the current evidence in literature; 3) Following the presentation, listeners will be able to counsel their patients on the use of e-cigarettes with an evidence-based approach

**Abstract:**

An e-cigarette is an electronic device used to heat a specialized liquid, creating a vapour to be inhaled by the user, often used in place of a conventional cigarette. The prevalence of these devices has been drastically increasing in Canada since their introduction to the US market in 2007. With this emergence, it is important for Otolaryngologists to be educated on these devices to be able to better guide their patients regarding their use. This paper is a comprehensive review, outlining the use of e-cigarettes, the current evidence on the topic, as well as the laws and regulations around their purchase and use.

Despite e-cigarettes recent negativity in the media and continued lack of long-term evidence on safety, current literature continues to show the drastic reduction in harm compared to conventional cigarettes. While e-cigarettes may still contain some of the toxins found in conventional cigarettes, they are present at significantly lower concentrations. Furthermore, they have been shown to reduce many of the short-term side effects of smoking. Multiple studies have also found e-cigarettes to be effective for use as a smoking cessation aid. E-cigarettes are not all made equal however, and newer generation models have been

shown to both, have a better safety profile, and be more effective in smoking cessation. Although non-smokers should be counselled to avoid e-cigarettes in the same manner as conventional cigarettes, evidence is continuing to show that they are a much better alternative to conventional cigarettes for smokers.

09:15 p.m. - 09:20 p.m.

**Characteristics of Surgeons Disciplined by Professional Colleges in Canada - G. Sampieri, J. Xu, J. Matelski, J. Liu, C. Bell, E. Monteiro, Toronto, ON**

**Learning Objectives:**

After this educational session, participants will be able to: -Identify characteristics of surgeons disciplined in Canada; -Compare the nature of misconduct and penalties between surgeons and non-surgeons; -Assess potential interventions to help mitigate misconduct amongst surgeons.

**Abstract:**

**BACKGROUND:** Identifying physicians who have faced disciplinary action by professional licensing authorities is important for public safety. Previous studies aimed to elucidate characteristics of psychiatrists, anesthesiologists and internal medicine physicians disciplined by regulatory authorities across Canada. Currently, no such organized data or analyses exist for surgeons. We sought to compare the number and nature of disciplinary cases of surgeons with those of non-surgeons. **METHODS:** Using a retrospective cohort design, we constructed a database of all physicians disciplined by the various Colleges of Physicians and Surgeons in Canada from 2000 to 2017 including demographic information, types of disciplinary findings and penalties. **RESULTS:** There were 174 (15.8%) surgeons of 1100 physicians disciplined in Canada from 2000-2017, greater than their national proportion. Within this group, 161 (92.5%) were male and 50 (28.7%) were international medical graduates. For disciplined surgeons, the average number of years from medical school graduation to disciplinary action was 31.4. The most common specialties disciplined were obstetrics and gynecology (32.3%), and general surgery (27.6%). The number of disciplined otolaryngologists was 7 (4%), less than their national proportion. Surgeons were significantly more likely to be disciplined for standard of care issues, and less likely for inappropriate prescribing and sexual misconduct, when compared to non-surgeons. Regarding penalties incurred, surgeons were less likely to suffer revocation of their license. **INTERPRETATION:** Surgeons differ from non-surgeon physicians in the prevalence and nature of medical misconduct. Efforts aiming to decrease medical misconduct by surgeons could be targeted to interventions relating to standard of care issues.

09:20 p.m. - 09:25 p.m.

**Canadian Survey on Immediate Management of Tracheostomy Closure After Decannulation - A. Busuladzic, S. Brisebois, Sherbrooke, QC**

**Learning Objectives:**

1-Review the current literature on tracheostomy decannulation. 2- Assess the current practice of Canadian Otolaryngologists on the immediate management after tracheostomy decannulation.

**Abstract:**

**Objective:** The primary objective is to understand and document the current practice by Canadian otolaryngologists on the immediate management of tracheostomy closure after decannulation, considering the current lack of evidence-based guidelines on the subject. **Method:** An 18-questions electronic survey was sent to all Otolaryngology-Head & Neck surgeons from the province of Quebec via the Association d'ORL du Québec and will be sent to Canadian surgeons via the Canadian Society of Otolaryngology-Head and Neck Surgery (CSO-HNS). **Preliminary results:** Forty-nine participants were included. The majority of responders were generalists (57%) working in a community setting (59%) with 10-20 years of practice (45%). Capping of the tracheostomy tube for 24-48h was required prior to decannulation in 80% of practitioners. Endoscopy prior to decannulation was rarely or never done by more than 50% of clinicians. Primary closure and secondary closure were considered by 67% and 69% of participants, respectively. Acute respiratory complications after decannulation was reported by 60% of responders. In 45% of those, the event occurred after primary closure, while in 50% of cases, it happened after secondary closure. The majority (86%) of surgeons encountered no or less than one prolonged tracheocutaneous fistula in 5 years. Management of tracheostomy closure was based mostly on the clinician's prior education (59%) and clinical experience (27%). **Conclusion:** The use of primary closure is comparable to the use of secondary closure. The reported rate of complications is low. Randomized controlled trials are needed to improve current management protocols and support future evidence-based guidelines.

09:25 p.m. - 09:30 p.m.

Discussion

09:30 p.m. - 09:35 p.m.

**Global Burden of Head and Neck Cancer: Economic Consequences, Health, and the Role of Surgery - J. Siu, Toronto, ON, R. Patterson, V. Fischman, Boston, MA, I. Wasserman, New York, NY, M. Shrimme, Boston, MA, J. Fagan, Cape Town, SA, W. Koch, Baltimore, MD, B. Alkire, Boston, MA**

**Abstract:**

**Objective:** We aimed to describe the mortality burden and macroeconomic effects of head and neck cancer as well as delineate the role of surgical workforce in improving head and neck cancer outcomes. **Methods:** We conducted a statistical analysis on data from the World Development Indicators and the 2016 Global Burden of Disease study to describe the relationship between surgical workforce and global head and neck cancer mortality-to-incidence ratios. A value of lost output model was used to project the global macroeconomic effects of head and neck cancer.

09:35 p.m. - 09:40 p.m.

**Medical versus Surgical Management of peritonsillar abscesses: a systematic review and meta-analysis - D. Curry, D. Forner, K. Hancock, S. M. Taylor, M. Corsten, J.R. Trites, C. MacKay, M. Rigby, Halifax, NS**

**Learning Objectives:**

1. Following this presentation, participants will be able to apply various treatment options to patients with peritonsillar abscesses 2. Following this presentation, participants will have gained knowledge in the current quality of evidence surrounding medical versus surgical management of peritonsillar abscesses.

**Abstract:**

**Background** - Peritonsillar abscesses (PTA) are common on-call emergency consultations for otolaryngologists. While surgical interventions for PTA are commonly performed procedures, they are not without risk. Medical management alone may offer satisfactory treatment without the risk carried by surgical intervention. Therefore, this study sought to perform a systematic review of medical treatment alone for the treatment of PTA. **Methods** - MEDLINE, EMBASE, Cochrane CENTRAL, and clinicaltrials.gov were searched. Studies directly comparing the outcomes of medically treated to surgically treated patients were included. Risk of bias was assessed using the Newcastle-Ottawa Scale. All screening and data extraction were completed by two independent reviewers. **Results:** 987 non-duplicate studies were retrieved. Eleven cohort studies and one randomized controlled trial were included (ntotal = 33,468). Study quality was low, with no studies providing matched analysis. The combined rate of treatment failure in patients initially treated with medical management alone was 5.7% compared to 5.5% in the surgical group. There was no statistically significant difference in risk of treatment failures between interventions through random effects model meta-analysis (OR 1.49, 95% CI [0.72,3.11], p = 0.28, I2 = 92%). Subgroup analysis of adult patients alone revealed a significantly increased odds of treatment failure when initially managed with medical intervention (OR 3.03, 95% CI [1.27, 7.21], p = 0.01, I2 = 0%). **Conclusion** - Treatment failure rates are similar for patients with PTA managed through medical intervention alone compared to surgical intervention. Evidence quality remains low and heterogeneous and would benefit from further prospective observational or experimental studies.

09:40 p.m. - 09:45 p.m.

**Current Trend of Antibiotic Prescription and Management for Peritonsillar Abscess: A Cross-Sectional Study - V. Wu, M. Manojlovic-Kolarski, E. Monteiro, Y. Chan, Toronto, ON**

**Learning Objectives:**

1. To identify the current practice patterns among trainees and staff physicians for the outpatient management of peritonsillar abscesses; 2. To emphasize the variability of current antibiotic prescription in the management of peritonsillar abscesses; 3. To discuss the importance of practice guidelines in the management of diseases

**Abstract:**

**Background:** Peritonsillar abscess (PTA) represents the most common deep neck space infection and can potentially cause airway obstruction, sepsis, and death. To our knowledge, there are no consensus guidelines for managing PTAs despite its prevalence. In order to determine best practice guidelines, current practice patterns must first be established. **Methods:** This cross-sectional study utilized a survey, administered to Otolaryngology - Head & Neck Surgery (OHNS) trainees (residents and fellows) and faculty (academic and community) on a voluntary basis at OHNS courses. The primary outcome was the type of antibiotic prescribed. Secondary outcomes assessed differences in workup, management, prescription, and follow-up. **Results:** Preliminary analysis was performed on the first 46 respondents; 24 (52%) were trainees. On average, 14.5 (SD 12.0) PTAs were managed within the last year. All respondents prescribed oral antibiotics, with Clavulin being the most common (63%). Trainees prescribed Clavulin more often than staff (83% vs. 41%, p=0.005). For workup, the majority evaluated with manual palpation of the PTA (61%) and CBC (70%). Use of nasopharyngoscopy (30%) and imaging (11%) were uncommon. Intravenous antibiotics (78%) and steroids (67%) were frequently used. Regarding surgical management, 9% performed needle aspiration only, 30% used incision and drainage only, and 61% performed both. Opioids were frequently prescribed for pain control (60%). The majority (74%) arranged follow-up, with staff requesting OHNS follow-up more often than trainees (78% vs. 38%, p=0.03). **Conclusion:** There is heterogeneity in the management of PTAs, with variability in antibiotic prescription and follow-up of patients among trainees and staff members.

09:45 p.m. - 09:50 p.m.

Discussion