# Abstracts
# Podium: General Otolaryngology
# Tuesday, June 9, 2015 @ 13:00-14:30

**Factors Determining Referral Patterns to Otolaryngology by General Practitioners** – J. Scott, E. Wong, L. Sowerby**,** London, ON

**Learning Objectives**

1. By the end of this presentation Otolaryngologists will have a better understanding of the referral patterns and consultation requests of GP's to their specialty.
2. By the end of this presentation Otolaryngologists will be aware of strategies that may be used to strengthen and enhance their consultation service.

**Introduction**: No literature exists which examines referral patterns to, or the consultation process with, Otolaryngology. In a recent CMA nationwide survey of General Practitioners (GP's) Otolaryngology was listed as the second-most problematic specialty for referrals in Canada. **Objectives:** To gain understanding into the referral patterns and consultation requests of GP's to Otolaryngology. Ultimately, our goal is to improve communication channels between our specialty and those referring us patients. **Methods:** GP's who actively refer patients to Otolaryngology were asked to complete a short paper-based questionnaire. Data was analyzed using basic statistics with results reported in percentages. **Results:** A total of 50 GP's were surveyed. 66% of GP's prefer to refer to Otolaryngologists they know. They try to refer based on subspecialty but 58% admitted that wait times for specific physicians play a role in their choice. 75% of GP's would like a central referral system and only 54% were satisfied with the current referral process. 74% of GP's want Otolaryngologists that do not deal with a particular problem they have been referred, to forward the consult to the necessary Otolaryngologist. Half of those surveyed like to have notes from every encounter. 42% of GP's were unhappy with current wait times. Overall, 66% of family physicians were satisfied with the consultation process at present. **Conclusion:** Improvements can and need to be made to the Otolaryngology referral and consultation process. A central referral system appears to be preferred and has the potential to address many of the concerns outlined by GP's.

**Relationship between Upper Airway Collapse Location and Severity of Obstructive Sleep Apnea** – R. Schwartz, R. Payne, V.-I. Forest, M. Hier, A. Fanous**,** Montreal, QC

**Learning Objectives**

1. To learn of a more in-depth relationship between the upper airway collapse in obstructive sleep apnea (OSA) and the severity of the condition, in order to progress in its diagnosis and treatment.
2. To allow for otolaryngology experts' more effective diagnosis of OSA upon the use of endoscopic evaluations for any suspected sleep apnea patients.
3. To guide the consideration and use of surgical procedures for head and neck surgeons in the treatment of OSA in all patients, following diagnosis.

**Objectives:** To determine the relationship between the location of upper airway (UA) collapse and the severity of obstructive sleep apnea (OSA). **Method:** Endoscopic Mueller maneuvers examining the UA were performed on 604 patients with OSA. Three areas of UA collapse were evaluated: velopharynx (VP), base of tongue (BOT), and lateral pharyngeal wall (LPW). The degree of obstruction was measured using the following scale of collapse: <50% (minimal), 51-75% (moderate), and 76-100% (severe). A sleep study was done after to determine OSA severity with the apnea-hypopnea index (AHI). **Results:** At the VP, patients with minimal (21 patients), moderate (51), and significant (482) VP collapse had AHI means of 15.04, 17.88, and 22.72, respectively. A Pearson's correlation (r) between VP collapse and OSA was found ($r = 0.083$, $p = 0.05$). At the BOT, patients with minimal (134 patients), moderate (268), and significant (202) BOT collapse had AHI means of 12.95, 20.26, and 30.61, respectively. At the LPW, patients with minimal (169 patients), moderate (168), and significant (134) collapse had AHI means of 14.27, 20.46, and 28.08, respectively. Pearson's correlations (r) were found between BOT collapse and OSA severity, as well as LPW collapse and OSA severity ($r = 0.33$ and $r = 0.32$, respectively, $p = 0.05$). **Conclusion:** In this study, the degree of collapse of the UA at the levels of the BOT and LPW correlates significantly with the severity of OSA. The VP collapse correlates weakly, but is nonetheless statistically significant. 242 words

**Comparing the Analgesic Efficacy of Four Gargles used in the Postoperative Period of Cauthery-Assisted Palatal Stiffening Operation (CAPSO): A Randomized Single-blind Study** – N. Rouillard-Bazinet, N. Hagenimana, N. Hilareguy, Sherbrooke, QC

**Learning Objectives**

1. Increase awareness regarding pain management options after intraoral procedures.
2. Evaluate some of the most common analgesic gargles and compare their efficacy to a solution of acetylsalicylic acid.
3. Comment on the effectiveness and patient acceptability of the Cauthery-Assisted Palatal Stiffening Operation.

**Introduction:** CAPSO is a procedure to relieve snoring that is performed regularly. Despite the simplicity of the procedure, it provides moderate pain for 7 to 10 days. In a previous study of ours, we have demonstrated the safety of an acetylsalicylic acid (ASA) solution gargle to relieve pain. No study has compared the analgesic efficacy of this solution to different gargles. **Objective:** To compare the analgesic efficacy of 4 gargles used in the postoperative period after CAPSO: a solution of ASA, a solution of Benzydamine, a solution of viscous Xylocaine 2% and a solution of ice water. **Method:** 40 patients with snoring, undergoing CAPSO, were randomly divided into 4 groups corresponding using the aforementioned gargles. In the postoperative period, use of acetaminophen and morphine was documented for 7 days. A visual analog pain scale was used by participants twice daily. Tolerance and acceptability of the gargles and the efficacy CAPSO were assessed. **Results:** We identified a significant improvement in Thornton score after surgery ($p < 0.001$). The improvement in pain between 8 am and 6 pm was significant for all gargles ($p < 0.001$), although this difference was not greater for one or the other ($p = 0.91$). Doses of morphine used were higher for the ASA and the ice water groups (4 to 6 mg per day more) ($p < 0.001$). All gargles were well tolerated. **Conclusion:** The analgesic efficacies of the gargles composed of ASA, Benzydamine, viscous Xylocaine 2% or ice water are comparable in the postoperative CAPSO period. Use of opioids was statistically higher in the ASA and ice water groups, in an amount judged to be clinically insignificant. CAPSO remains an effective procedure that is not without side effects.

**An Outcomes Analysis of Anterior Epistaxis Management in a Tertiary Care Emergency Department –** E. Newton, A. Lasso, S. Kilty**,** Ottawa, ON

**Learning Objectives**

By the end of the presentation the audience member will be aware of:

1. The discrepancies in current management modalities utilized in the emergency department for anterior epistaxis;
2. A comparison of outcomes of the management techniques used to treat anterior epistaxis in the emergency department.
3. The cost of interventions for anterior intervention.

**Objective:** Many treatment options exist for the management of anterior epistaxis. However, little is known about treatment outcomes. The objective of this study was to identify the methods of management and outcomes for patients with anterior epistaxis presenting to the emergency department (ED) at a Canadian tertiary care center. **Methods:** A retrospective review of ED visits from April 2013-April 2014 for patients with a diagnosis of epistaxis was performed. Patient demographic data, comorbidities, and treatment methods were documented. The efficacy and cost of different treatment modalities was determined. **Results:** 154 primary adult anterior epistaxis cases were included. Mean patient age was 70 years and 51% of patients were female. Comorbidities included hypertension (55%), diabetes (20%), CAD (32%), prior CVA (14%), and atrial fibrillation (26%). A large proportion (62%) was on anticoagulant therapy. The most common treatment modalities were Merocel packing, silver nitrate cauterization, nasal clip, petroleum gauze packing, and 22% were simply observed. Initial treatment success was achieved in 70% of cases. The best initial success rates were with petroleum gauze packing (92%), Merocel (70%) and silver nitrate (65%). Almost 20% of patients required additional treatment in the ED due to treatment failure. Approximately 25% of patients returned to the ED for recurrence of epistaxis with highest rates occurring in the nasal clip (43%), Merocel (33%) and petroleum gauze packing (31%) groups. **Conclusion:** Treatment options and their effectiveness for anterior epistaxis

are variable. Further study is needed to establish best clinical practices for the management of anterior epistaxis in adults.

**Percutaneous Tracheotomy in Canada - Are We Missing Out?** – A. Darnbrough, Winnipeg, MB, K. Kost, Montreal, QC

**Learning Objectives**

1. At the end of this session, participants will have an appreciation of current training and exposure in both open and percutaneous tracheotomy techniques for otolaryngology and general surgery residents in Canada.
2. Be familiar with recent literature on safety and efficacy of percutaneous tracheotomy techniques.
3. Be aware of the differences in training in tracheotomy techniques between ENT and general surgery residents in Canada.
4. Understand the role of bronchoscopy during bedside percutaneous tracheotomy in Canada.
5. Be aware of the gaps and barriers that currently exist in training around percutaneous tracheotomy techniques.

**Objectives:** Tracheotomy is the most common surgery performed in the ICU. In the US, the number of tracheotomies by otolaryngologists has decreased because other services have adopted percutaneous tracheotomy (PT) programs. This could seriously impact training for both open tracheotomy (OT) and PT in Canada. We aim to evaluate current residency training in OT and PT across both otolaryngology and general surgery residency programs. **Methods**: A web-based survey containing 18 questions was distributed to Canadian ENT and General Surgery residents. **Results:** Reponses were obtained from 39 ENT residents, and 57 general surgery residents. 78% reported that their institution regularly performs PT. Services performing PT included General Surgery, ENT, Intensive Care, and Thoracic Surgery. 29% of ENT residents report less exposure to tracheotomy because they are not performing PT. Reasons included “staff not interested” or “no staff routinely perform the technique”. For PT, 50% of ENT residents and 47 % of general surgery residents reported adequate training. For OT, 91% of ENT residents of 24 % of general surgery residents reported adequate training. 92% of residents felt PT is important to their education, and 68% of residents desired more PT training. **Conclusion:** PT remains a controversial topic for residency education, however the majority of residents want more exposure to this technique.

**Implementing a Safe Outpatient Thyroidectomy Program in Your Practice** – L. McLean**,** Ottawa, ON, J. Harris, Edmonton, AB, M. Hearn, Ottawa, ON

**Learning Objectives**

Through participation in this workshop, the participant will:

1. Be aware of the literature that provides the foundation for safe outpatient thyroid surgery.
2. Explore patient selection criteria for safe outpatient thyroid surgery
3. Review examples of safe outpatient thyroid surgery protocols that may be utilized in her/his own practice setting.

This presentation is intended for surgeons who perform thyroid surgery and would like to consider implementation of outpatient thyroid surgery. Thyroid surgery is commonly performed by many Otolaryngologists. Post-operative care of patients undergoing thyroid surgery is variable. Traditionally, patients undergoing thyroid surgery were admitted post-operatively, monitored for complications including hematoma and hypocalcemia and discharged once stable. Length of stay varied from one to several days. However, in the last decade, there is ever increasing data regarding the safety of outpatient thyroid surgery including total thyroidectomy and completion thyroidectomy. With proper patient selection, patient and caregiver education, pertinent screening, and supplementation when required, thyroid surgery can be and is now also performed as outpatient surgery. In this interactive workshop, we will review the literature surrounding outpatient thyroid surgery, provide strategies for patient selection for outpatient thyroid surgery and provide examples of successful protocols that have been implemented which allow for safe outpatient thyroid surgery.

**A Randomized Controlled Trial Assessing the Efficacy of Topical Benzocaine in Reducing Pain and Discomfort During Intra-tympanic Corticosteroid Injections –** N. Lebo, J. Bonaparte, Ottawa, ON

**Learning Objectives**
By the end of this presentation, the learner will:

1. Have reviewed the commonly used methods for local anesthesia during intra-tympanic membrane injections, and be able to describe their relative efficacy.
2. Be able to describe a method of topical application of benzocaine into the external auditory canal prior to intra-tympanic injection of corticosteroids.
3. Be able to recognize topical benzocaine as an effective means for reducing pain and discomfort associated with intra-tympanic injections.

**Objective:** To test the hypothesis that use of topical benzocaine in the external auditory canal will result in improved pain and comfort during intra-tympanic corticosteroid injections. **Methods:** A single-blind, randomized, placebo-controlled study was conducted. Thirty patients were randomized to receive either a topical application of benzocaine 30% or placebo (saline) directly on the tympanic membrane. After 3 minutes, an injection of Kenalog using a 29-gauge needle was performed. Pain/discomfort of the entire procedure was assessed using a 100mm Visual Analogue Scale. A secondary outcome of incidence of vertigo during or after the procedure was assessed. A two-sample T-test was used to assess the primary outcome measure, while a chi-square test assessed the rate of vertigo. **Results:** The mean (standard deviation) of pain when using topical benzocaine was 19.10 mm (14.6) while placebo was 40.09 (17.70) (p=0.001). No difference was observed in the rates of vertigo between the two groups (p=0.67). **Conclusions:** The use of topical benzocaine prior to intra-tympanic corticosteroid administration safely and quickly reduces the pain and discomfort associated with an intra-tympanic injection.

**Mobile Video Endoscopy: Is a Cell Phone Video a Suitable Replacement for a Video Tower?** – H. Liu, M. Bromwich, Ottawa, ON

**Learning Objectives**
By the end of this presentation, the learner will be able to:

1. Describe what a mobile endoscopic adapter is;
2. Compare the advantages and disadvantages of the mobile endoscopic adapter against the tower setup for flexible nasopharyngoscopy;
3. Interpret the survey data and evaluate the image quality of the mobile endoscopic adapter and the tower setup.

**Background:** Video endoscopy has long been essential to modern Oto-HNS practice. The ClearScope Adaptor (Clearwater Clinical Limited, Ottawa) is a mobile endoscope adapter designed to connect smartphones to endoscopes. This adaptor enables HD video recording on mobile devices and facilitates secure video storage and sharing among clinicians. In this study, we investigated how the mobile endoscopic adapter compares against the traditional video tower setup with respect to image quality, diagnosis and physician satisfaction. **Methods:** We prepared sixty 10-second video clips of flexible nasopharyngoscopy. Thirty were captured using a mobile adaptor and thirty with a standard video tower. We then randomized the clips and had 12 Oto-HNS experts rate the videos and provide a diagnosis. **Results:** We found no difference in the raters' satisfaction with quality when comparing mobile adapter against tower (mean difference=0.0). Raters were able to make the correct diagnosis at a rate of 56.75%±7.11% for mobile adapter and at a rate of 56.75% ±9.98% for tower. **Conclusion:** Survey participants rated the overall video quality of mobile adaptor videos and tower videos equally at 3.47 on a 5-point scale. Their accuracy at diagnosing pathologies from the 10-second videos was 56.75% when viewing mobile adaptor videos and 56.75% when viewing tower videos. Our results show that mobile adaptor videos are comparable to tower videos in their image quality and utility. Mobile endoscopy is a practice changing advancement and this is the first study to compare mobile endoscopic video against the traditional tower setup.

**Formal Mentorship in a Surgical Residency Training Program** – H. Zhang, Edmonton, AB

Abstract TBA

**The Use of Absorbable PDS Plates in Nasal Septum Reconstruction** – B. Hassouneh, P.S. Nassif, Los Angeles, CA

**Learning Objectives**

1. Appreciate the potential role of absorbable PDS plates in nasal cartilage reconstruction.
2. Recognize the potential complications or concerns with the use of PDS plates.

**Objectives:** The introduction of absorbable PDS plates has added an important armamentarium to the facial plastic surgeon. Although several authors reported on the applications of PDS plates, their usage remains limited. This is a pilot study on the safety and efficacy of absorbable PDS plates in nasal septum reconstruction. **Methods:** Ten consecutive patients with PDS plates were followed prospectively for surgical outcome and complications. The mean follow-up was 6 months. The PDS plates were used to splint warped or fractured cartilage, to piecing together cartilage segments, and to reshape or straighten cartilage grafts. The PDS plates were not used as a substitute for cartilage material. **Results:** All patients had good functional and aesthetic results. One patient had infection that was successfully treated with antibiotics, and one patient had exposure of the plate that required removal and subsequently healed favorably. This seemed to be related to plate placement that is close to area of mucosa incisions. **Conclusion:** PDS plates are a helpful adjunct in septal reconstruction particularly when it is difficult to control the shape of the cartilage or the reconstruction graft. It facilitates the use of cartilage segments that may otherwise be unstable or unusable. Complications such as exposure and infection were relatively low and may be associated with plate placement close to mucosal incisions. The results should be considered with caution because this was a small series.