Department of Otolaryngology – Head and Neck Surgery

43rd ANNUAL RESIDENTS' RESEARCH DAY

Friday May 19th, 2017 Joanne and Kenny Theatre Darryl J. King Student Life Centre King's University College 266 Epworth Avenue Western University • Canada





CONTINUING PROFESSIONAL DEVELOPMENT PLANNING COMMITTEE MEMBERS Disclosure Form

I have/have had in the past 2 years a financial interest, arrangement or affiliation with one or more organizations that could be perceived as a direct or indirect conflict of interest in the context or content of this education program.

1. **Josee Paradis:** None

2. Lorne Parnes: Med-El

3. Kathryn Roth: Hoffmann-La Roche

4. Leigh Sowerby: Vertex Pharmaceuticals, Biosense Webster,

GlaxoSmithKline, MEDA pharmaceuticals

5. **John Yoo:** None

LEARNING OBJECTIVES

To critically appraise the scientific presentations with respect to methodology and clinical applicability pertaining to Otolaryngology – Head and Neck Surgery

STUDY CREDITS

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification program of The Royal College of Physicians and Surgeons of Canada, approved by Continuing Professional Development, Schulich School of Medicine & Dentistry, Western University (5.5 hours).

Each participant should claim only those hours of credit that he/she actually spent participating in the educational program.

DEPARTMENT OF OTOLARYNGOLOGY – HEAD AND NECK SURGERY 43RD ANNUAL RESIDENTS' RESEARCH DAY

8:00 – 8:30	COFFEE IN THE EXHIBITOR AREA				
8:30 – 8:40	WELCOME	Dr. John Yoo			
8:40 – 8:50	EDUCATIONAL OBJECTIVE OV	ZERVIEW Dr. Kathryn Roth			
CHAIR: DR. DANIELLE MACNEIL					
8:50 – 9:00	Dr. Laura Kim	Radiologic Assessment of the Lateral Scapula and Scapular Tip for Dental Implant Suitability in Patients Undergoing Mandibular Reconstruction (Supervisor: Dr. J. Yoo)			
9:00 – 9:05	INTERACTIVE DISCUSSION				
9:05 – 9:15	Dr. Neil Mundi	Using Hydrogen Peroxide as a Neo-Adjuvant Treatment in the Surgical Excision of Non-Melanoma Skin Cancers (Supervisor: Dr. C. Moore)			
9:15 – 9:20	INTERACTIVE DISCUSSION				
9:20 – 9:30	Dr. Peng You	Improving Learning and Confidence Through Small Group, Structured Otoscopy Teaching: A Prospective Interventional Study (Supervisor: Dr. M. Husein)			
9:30 – 9:35	INTERACTIVE DISCUSSION				
9:35 – 10:15	COFFEE IN THE EXHIBITOR AREA				
10:15 – 10:25	Dr. Chris Dwyer	Reoperative Parathyroidectomy for Persistent Primary Hyperparathyroidism – A Tertiary Care Institution Experience (Supervisor: Dr. D. MacNeil)			
10:25 – 10:30	INTERACTIVE DISCUSSION				
10:30 - 10:40	Dr. Horace Cheng	Prospective Study of Round Window Reinforcement for Superior Canal Dehiscence (Supervisor: Dr. L. Parnes)			
10:40 – 10:45	INTERACTIVE DISCUSSION				

INTRODUCTION OF THE DISTINGUISHED VISITING PROFESSOR – DR. ROBERT L. FERRIS Dr. Anthony Nichols

10:45 – 11:45	Dr. Robert L. Ferris	Building Translational and Clinical Research to Change Practice: Therapeutic Targeting of HPV+ Head and Neck Cancer		
11:45 – 12:00	INTERACTIVE DISCUSSION			
12:00 – 1:15	LUNCH IN LABATT HALL			
1:15 – 1:25	WELCOME BACK	Dr. Kathryn Roth		
	SPONSOR – EDUCATIONAL GRAND SUPPORT AWARD			
CHAIR: DR. LORNE PARNES				
1:25 – 1:35	Dr. Rakhna Araslanova	Management of Pediatric Aural Foreign Bodies in the Emergency Department: An Evidence-Based Otolaryngology Referral Algorithm (Supervisor: Dr. M. Husein)		
1:35 – 1:40	INTERACTIVE DISCUSSION			
1:40 – 1:50	Dr. Sandeep Dhaliwal	The Role of Voice Rest on Voice Outcomes Following Phonosurgery: A Randomized-Controlled Trial (Supervisor: Dr. K. Fung)		
1:50 – 1:55	INTERACTIVE DISCUSSION			
1:55 – 2:05	Dr. John Scott	The Effectiveness of Topical Colloidal Silver in Recalcitrant Chronic Rhinosinusitis: A Randomized Crossover Control Trial (Supervisors: Dr. B. Rotenberg and Dr. L. Sowerby)		
2:05 – 2:10	INTERACTIVE DISCUSSION			
INTRO	INTRODUCTION OF THE DISTINGUISHED GUEST ALUMNUS – DR. SCOTT HAMILTON Dr. Leigh Sowerby			
2:10 – 3:10	Dr. Scott Hamilton	Challenges in Cutaneous Oncology		
3:10 – 3:40	INTERACTIVE DISCUSSION AL	L TOPICS		
3:40 – 3:50	EXHIBITOR DRAW AND PRESENTATION OF RESIDENT AWARDS Dr. Kathryn Roth			

3:10 – 3:40	INTERACTIVE DISCUSSION ALL TOPICS		
3:40 – 3:50	EXHIBITOR DRAW AND PRESENTATION OF RESIDENT AWARDS Dr. Kathryn Roth		
	Undergraduate Teaching Award	Dr. Murad Husein	
	Simon Kirby Most Caring Resident Award	Dr. Brian Rotenberg	
3:50 – 4:00	EVALUATION FORM COMPLETION AND ANNOUNCEMENTS	Dr. Kathryn Roth	
4:00 – 4:15	FINAL EDUCATIONAL COMMENTS AND GROUP PHOTO	Dr. Kathryn Roth	

Dr. Robert L. Ferris Distinguished Visiting Professor

Dr. Robert L. Ferris, MD, PhD is currently UPMC Endowed Professor, Chief of Head and Neck Surgery, and Fellowship Director at the University of Pittsburgh Cancer Institute. He is Co-Leader of the Cancer Immunology Program and Associate Director for Translational Research. Dr. Ferris serves on the Editorial Boards of JNCI, JCO, Clinical Research, Cancer Immunology Research, and is the Section Editor for Cancer. He is Editor in Chief of Oral Oncology. Dr. Ferris has published 250 peer-review manuscripts and is co-chair of the NCI Head and Neck Steering committee.

Dr. Ferris's NIH-funded laboratory is focused on phase II-III trials of anti-PD-1 and anti-CTLA-4 immunotherapy. He currently chairs the NIH tumor Microenvironment study section. He is PI of several prospective surgical trials through ECOG-ACRIN. He is PI of the University of Pittsburgh SPORE in H&N cancer, and T32 grant, "Training of Head and Neck Oncologists," both funded by NCI until 2020.

PLATINUM LEVEL SPONSOR OF THE DISTINGUISHED VISITING PROFESSOR



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Dr. Scott Hamilton Distinguished Alumnus

Dr. Scott Hamilton proudly completed his residency in Otolaryngology – Head and Neck Surgery at Western University in 2009, and then pursued a Master's degree in Skin Cancer Management at the University of Queensland. He has established a unique practice in Peterborough that focuses exclusively on cutaneous oncology, performing nearly 3000 cases per year. He serves as director of a Skin Cancer Surgery & Reconstruction fellowship through Queen's University. He and his wife Shannon are busy parents to four fabulous kids.

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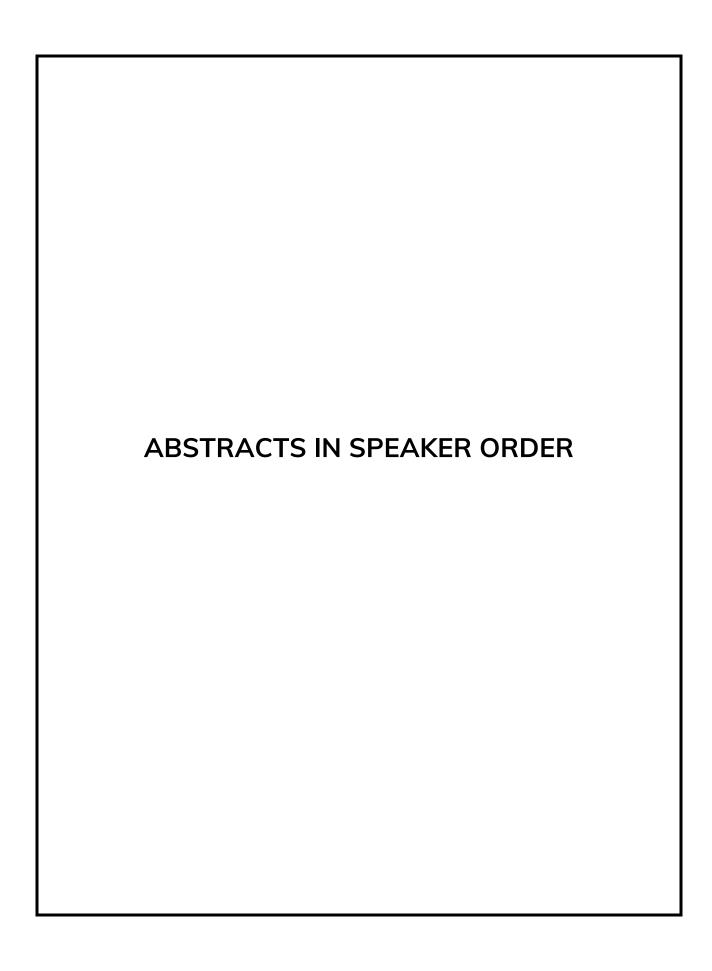


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RADIOLOGIC ASSESSMENT OF THE LATERAL SCAPULA AND SCAPULAR TIP FOR DENTAL IMPLANT SUITABILITY IN PATIENTS UNDERGOING MANDIBULAR RECONSTRUCTION

Dr. Laura Kim

BACKGROUND:

Reconstruction of mandibular defects using osseous free flaps has been used widely in the setting of oncologic surgical ablation. Over time, more experience has been gained with the use of subscapular system flaps, and distinct advantages have been realized for its use in certain clinical situations and patient demographics. However, its suitability for dental implants post reconstruction has not been well studied in the current literature.

OBJECTIVE:

To characterize the morphology of the lateral scapula and scapular tip, and to further assess its suitability in dental implants with implications for patients undergoing mandibular reconstruction.

METHODS:

A retrospective analysis was performed on patients undergoing single-stage mandibular reconstruction with subscapular system flaps in a single academic tertiary care medical center. CT of the thorax, completed routinely for staging purposes, were used to analyze the morphology of the lateral scapula and scapular tip. The thickness of the lateral scapula was measured along the scapula starting from the scapular tip up to the glenoid fossa. Suitability of dental implants were based on the size and criteria of implants routinely used by the Oral and Maxillofacial Surgery department at our institution. This was determined to be a cortical thickness of greater than 0.7cm in a bone segment greater than 1cm in length (length of the dental implant). Segments of the lateral scapula which had met the criteria were considered suitable for dental implant post mandibular reconstruction. Additionally, the length of suitable lateral scapula/ scapular tip segments were compared between different patient demographics.

RESULTS:

A total of 30 patients (15 male, 15 female) were included in this study. Based on our criteria, predetermined based on routine practice from our institution, the average length of lateral scapula suitable for dental implants were 11.5cm for males and 5.7cm for females.

CONCLUSIONS: Mandibular reconstruction with subscapular system free flaps can be considered suitable for dental implants. Although there may be individual and gender variability, preoperative imaging studies maybe used for surgical planning in determining the ideal segment to be used along the lateral border of the scapula.

Supervisor: Dr. John Yoo

USING HYDROGEN PEROXIDE AS A NEO-ADJUVANT TREATMENT IN THE SURGICAL EXCISION OF NON-MELANOMA SKIN CANCERS

Dr. Neil Mundi

BACKGROUND:

Hydrogen peroxide (H2O2) a product of respiration in mitochondria and an important oxidizing agent in biological systems. In dermatology it is used frequently as a topical antiseptic and hemostatic agent. As it is a potent oxidizing agent, hydrogen peroxide can exert a role in oxidative stress, although the exact mechanism through which this occurs is not yet known. A previous investigation examining the use of H2O2 to treat seborrheic keratosis at or above a concentration of 23 percent found that the mean number of benign epidermal proliferations remaining at 90 days after treatment was significantly lower in the H2O2 group compared to placebo; this was after an average of six applications of hydrogen peroxide at roughly one week intervals. Hydrogen peroxide has also been used in combination with other topical treatments such as NSAIDs to successfully combat precancerous lesions such as actinic keratosis. In an area like the face, reconstruction of excision defects and ultimately aesthetic outcomes are of utmost importance. Given its relatively benign nature and previous efficacy in treating other skin growths, hydrogen peroxide may represent a simple yet effective method at shrinking non-melanoma skin cancers of the head and neck before they are excised.

OBJECTIVE:

Our objective is to determine the effectiveness of hydrogen peroxide as a pre-treatment for non-melanoma skin cancers undergoing surgical excision. As a secondary outcome measure, the number of hydrogen peroxide treatments is determined, where excision is ideal and further hydrogen peroxide treatment is of no further benefit hence minimizing cost and morbidity.

METHODS:

All individuals presenting to the Skin Cancer Clinic have their lesions evaluated by the senior author for participation in the study. If the lesion is suitable, the borders of their lesion are outlined directly on the patient's skin by the senior author using a standard surgical felt-tip marking pen. The lesion borders are then transcribed using the same marking pen onto a clear acetate film, which is placed over the lesion. Lesions will be photographed before intervention and before excision. Images will be used to measure lesion dimensions, area and shape. The 33% hydrogen peroxide is rubbed into the lesion and a 1 cm border until blanching of the lesion is observed. Hydrogen peroxide is reapplied after one hour. Patients will then be seen in a follow-up clinic for assessment of re-demarcating of the lesion.

RESULTS:

Hydrogen peroxide was successful in reducing the size of multiple non-melanoma skin lesions. In the case of a basal cell carcinoma, it was able to completely remove the skin lesion leaving no significant scarring with minimal patient discomfort and no appreciable side effects.

CONCLUSIONS:

Hydrogen peroxide demonstrates an ability to successfully treat superficial non-melanoma skin lesions. We have demonstrated a reduction in the size of multiple lesions after application of 33% hydrogen peroxide. Further investigations are required to determine the exact mechanism of the effect observed in this study.

Supervisor: Dr. Corey Moore

IMPROVING LEARNING AND CONFIDENCE THROUGH SMALL GROUP, STRUCTURED OTOSCOPY TEACHING: A PROSPECTIVE INTERVENTIONAL STUDY

Dr. Peng You

BACKGROUND:

Otologic diseases are common and associated with significant health care costs. While accurate diagnosis relies on physical exam, existing studies have highlighted a lack of comfort among trainees with regards to otoscopy. As such, a dedicated otoscopy teaching time was incorporated into the undergraduate medical curriculum in the form of a small group teaching session.

OBJECTIVE:

To examine the effect of a small-group, structured teaching session on medical students' confidence and learning with otoscopic examination.

METHOD:

In a prospective study design, an one-hour, small group workshop hosted by an otolaryngologist was delivered to medical learners. Workshop included introduction and demonstration of otoscopy and pneumatic otoscopy followed by practice with peer feedback. Survey of students' confidence with otoscopy and understanding of anatomical landmarks was distributed before (T1), immediately after (T2), and one month following the session (T3).

RESULTS:

One-hundred and twenty-five learners participated from Feb 2016 to Feb 2017. Forty-nine participants with complete data over T1-T3 demonstrated significant improvement over time in confidence (Wilk's lambda=.09, F(2,48)=253.31 p<.001, Eta-squared=.91) and learning (Wilk's lambda=0.34, F(2,47)=24.87 p<.001, Eta-squared=.66).

CONCLUSION:

A small-group, structured teaching session had positive and lasting effects on student confidence and learning with otoscopy. This underscores the important role of the otolaryngologist as educators within the undergraduate medical curriculum.

Supervisors: Saad Chahine, PhD and Dr. Murad Husein

REOPERATIVE PARATHYTROIDECTOMY FOR PERSISTENT PRIMARY HYPERPARATHYROIDISM – A TERTIARY CARE INSTUTITION EXPERIENCE

Dr. Christopher Dwyer

OBJECTIVES:

The aim of this study is to summarize the LHSC Otolaryngology-Head and Neck experience in revision surgery for persistent primary hyperparathyroidism (PHPT). Success rates for initial and revision surgeries were determined, and the causes underlying failed initial surgery were explored. The utility of repeat localization imaging, ability to complete a focused revision parathyroidectomy, as well as complication rates for reoperative surgery are also presented.

METHODS:

This was a retrospective cohort study of patients who underwent reoperation for persistent PHPT by the Otolaryngology-Head and Neck surgery group at our tertiary care referral center. A database of parathyroidectomy procedures between 2011-2016 was reviewed for all eligible patients. Reoperative procedures included patients with an initial operation at our surgical group, as well as those with a referral from another surgeon. Factors underlying an initial failed parathyroidectomy, results for repeat localization imaging, as well as postoperative complications were reviewed based on available hospital records.

RESULTS:

A total of 287 procedures (n=256 initial surgeries, n=31 revision surgeries) for PHPT were performed over a 5 ½ year period. Biochemical cure (normocalcemia at 6 months) following a single initial operation for PHPT at our institution was 92.3%. 21 patients underwent a total of 24 revision operations for persistent disease. 12 patients' initial operation was performed by our institution's surgical group, whereas 9 patients were referred from another surgeon. Biochemical cure for this reoperative group was 95.2% (n=20/21).

For patients whose initial operation was performed by our surgical group, missed multiglandular disease (n=10/12, 83.3%) was found most commonly during reoperation. Meanwhile, a missed solitary adenoma (n=6/9, 66.7%) was found in the referral group, usually in an eutopic location (4/6, 66.7%). Repeat localization studies were sometimes helpful in localizing persistent disease. A focused unilateral revision parathyroidectomy was therefore able to be performed in 87.5% (n=21/24) of such revision cases. The rate of transient post-operative hypocalcemia (corrected Ca < 2.15 mmol/L) following revision parathyroidectomy for persistent PHPT was 45.8%.

CONCLUSIONS:

Reoperative parathyroidectomy can be a challenging situation, but high success rates are still achieved with revision surgery for persistent disease. At our institution, this is most commonly due to missed multiglandular disease following an initial focused, unilateral operation. While initial pre-operative localization studies did not suggest multiglandular disease, additional hyperfunctioning parathyroid can be seen on re-imaging, allowing for a focused revision surgery. Of note, when including referrals from outside surgeons, a single missed adenoma is common. The post-operative risk of transient hypocalcemia for reoperative surgery is high, and patients should be monitored closely so that calcium and vitamin D can be supplemented accordingly.

Supervisor: Dr. Danielle MacNeil

PROSPECTIVE STUDY OF ROUND WINDOW REINFORCEMENT FOR SUPERIOR CANAL DEHISCENCE

Dr. Horace Cheng

BACKGROUND:

Superior semicircular canal dehiscence (SSCD) syndrome is an uncommon disorder characterized by a myriad of vestibular and cochlear symptoms. Over the past two decades, the diagnosis and management of this condition has progressed significantly. Conventional treatment includes middle fossa or transmastoid canal resurfacing and/or plugging. The round window reinforcement procedure is an alternative with presumed less surgical morbidity.

OBJECTIVE:

To evaluate the outcome of round window reinforcement in the management of superior semicircular canal dehiscence syndrome.

METHODS:

Twenty-three patients with diagnosis of SSCD who underwent the round window reinforcement procedure from 2010 to 2016 were included in this study. A total of 24 cases were reviewed. A previously published nine-item superior semicircular canal dehiscence (SSCD) patient survey was used to characterize patient symptoms pre- and post-operatively. Audiometric data before and after the operation was also collected and analyzed to evaluate hearing changes.

RESULTS:

Preoperative mean total symptom score was 37.8. It was reduced to 22.7 postoperatively, a 40% reduction. Improvement across all nine symptom categories was observed. Marked improvements were reported for sensitivity to pulsatile tinnitus (54%), bone conducted sounds (48%), and generalized imbalance (48%). On the other hand, modest improvement was noted in sensitivity to increased middle ear pressure causing dizziness (10.6%). Twenty patients had complete audiometric testing with mean preoperative pure tone audiometry (PTA) of 27.8 dB. It increased minimally to 31.5 dB postoperatively. Seven patients had improved or equal PTA after the procedure. Eleven patients were affected minimally with a PTA decline of 10 dB or less. One patient developed further conductive hearing loss of 11.7 dB while another developed a new 27.3 dB sensorineural hearing loss. The round window reinforcement procedure was successful in treating the symptoms of SSCD in 19 patients (82.6%). One patient required revision transmastoid semicircular canal occlusion.

CONCLUSIONS:

Round window reinforcement is effective in treating symptoms of SSCD. It serves as an alternative, and perhaps initial treatment prior to the more invasive middle fossa and transmastoid approaches. Patients report improvement in all symptom categories after the procedure. There has been minimal change to hearing in most cases. However, postoperative hearing decline has been observed in isolated cases.

Supervisor: Dr. Lorne Parnes

BUILDING TRANSLATIONAL AND CLINICAL RESEARCH TO CHANGE PRACTICE: THERAPEAUTIC TARGETING OF HPV+ HEAD AND NECK CANCER

Dr. Robert L. Ferris

Distinguished Visiting Professor

Dr. Ferris's NIH – funded laboratory is focused on reversal of immune escape and immunotherapy using monoclonal antibodies and cellular vaccines. Dr. Ferris is leading several prospective randomized trials, including ECOG 3311, testing radiation dose – deintensification after transoral robotic surgery (TORS) for HPV+ oropharynx cancer, and several randomized phase II-III trials of anti-PD-1 and anti-CTLA-4 immunotherapy.

He is Principal Investigator at the University of Pittsburgh Specialized Program of Research Excellence (SPORE) grant for translational head and neck research, and a T32 training grant, "Training of Head and Neck Oncologists," both funded by the National Cancer Institute until 2020. Dr. Ferris his authored numerous book chapters and co-edited two textbooks, Salivary Gland Disorders and Master Techniques in Head and Neck Surgery.

MANAGEMENT OF PEDIATRIC AURAL FOREIGN BODIES IN THE EMERGENCY DEPARTMENT: AN EVIDENCE-BASED OTOLARYNGOLOGY REFERRAL ALGORITHM

Dr. Rakhna Araslanova

BACKGROUND:

Aural foreign bodies (AFB) are a common cause of presentation to the Emergency Department (ED) estimated to account for over 250,000 ED visits per year in the United States. Children are more likely to require evaluation by an Otolaryngologist and retrieval with sedation or in an operative setting. Prior studies demonstrated that the type of the AFB affects successful retrieval and associated complications. Our primary objective was to create an evidence-based algorithm for referral to Otolaryngology of children presenting with AFB to the Pediatric ED by synthesizing our institution's data along with previously published studies. Secondary objective was to report and analyze patterns of pediatric AFB management at our center in order to characterize children who are most commonly referred to Otolaryngology.

METHODS:

A retrospective chart review of all children (age 0-18) presenting to the tertiary care Pediatric ED at London Health Sciences Centre from April 2014 through December 2016 with AFBs was performed. Demographics including age, gender, and past medical history were retrieved. Additionally, information on presenting symptoms, type of AFB, time to diagnosis, retrieval strategy employed, complications, need for Otolaryngology referral and use of sedation were also collected.

RESULTS:

One hundred and forty-five patients seen through the Pediatric ED who met the inclusion criteria of age and AFB location within the external auditory canal (EAC) were identified. Average age at presentation was 6 with the youngest patient being 1.5 years old. Most commonly retrieved AFBs were beads followed by stones and popcorn kernels. Otalgia was the most common presenting symptom. However, only 25.3% children had symptoms on presentation to the ED. Children with pre-existing comorbidity composed 13.8% of patients, with attention deficit hyperactivity disorder (ADHD) being most common followed by developmental delay (DD). ED physicians primarily flushed AFB out of the EAC with water, whereas Otolaryngology exclusively used direct visualization via otomicroscopy or equivalent loupe magnification. Otolaryngology was consulted for 42 children (29.0%). Of these, 69.0% had complications associated with prior AFB retrieval attempts. Majority of referred children were seen in clinic (57.1%) for AFB removal. Sedation was administered in 40.5% of referred children with 21.4% in an operative setting. Proportion of children aged less than 3 with AFB referred to Otolaryngology was 48.5%, compared to 19.7% in 4-6 year old group. In addition, 29.8% of 7-18 year old children required Otolaryngology for definitive management. Proportion of children in the 7-18 year old group with DD, ADHD or both was 25.5%.

CONCLUSION:

This preliminary data suggests that age stratification in management of pediatric AFB adds a novel threshold for early Otolaryngology referral. Moreover, comorbid ADHD and DD affected older children and therefore may be responsible for the observed higher referral rate in that age group. By combining our data with previously published AFB-related predictors of successful retrieval, an evidence-based referral algorithm has been proposed.

Supervisor: Dr. Murad Husein

THE ROLE OF VOICE REST ON VOICE OUTCOMES FOLLOWING PHONOSURGERY: A RANDOMIZED-CONTROLLED TRIAL

Dr. Sandeep Dhaliwal

OBJECTIVE:

Voice rest is prescribed following phonosurgery by most Otolaryngologists. This is done under the supposition that minimizing mucosal trauma would optimize vocal fold healing and voice quality outcomes. However, there is currently no empiric evidence to support this clinical practice. Moreover, post-operative voice rest presents a challenge for most patients by causing diminished social interaction and missed time from employment. The purpose of this prospective, randomized-controlled trial is to assess the effect of post-phonosurgery voice rest on vocal quality.

METHODS:

Patients with unilateral true vocal fold lesions undergoing phonosurgery were recruited in a prospective manner and randomized into one of two groups: 1) an experimental arm consisting of 7 days of absolute voice rest, or 2) the control arm consisting of no voice rest. All patients underwent surgical excision of the lesion using a carbon dioxide laser by a single surgeon at a tertiary care center.

The primary outcome measure was the Voice Handicap Index-10 (VHI-10) questionnaire, a validated instrument measuring patient perception of their voice handicap/quality. Secondary outcome measures included the Voice Related Quality of Life (V-RQOL) measure in addition to perceptual and acoustic voice measures. Voice samples consisting of sustained vowels, and a standard oral reading passage were recorded and analyzed for specific acoustic variables during signal analysis including frequency perturbation (jitter), amplitude perturbation (shimmer), fundamental frequency, and harmonic-to-noise ratio. Aerodynamic measures consisting of maximum phonation time were extracted. Subjective analysis of the voice recordings by two experienced listeners blinded to the intervention was performed using the Consensus Auditory-Perceptual Evaluation of Voice (CAPE-V). Primary and secondary outcomes were both assessed pre-operatively to obtain a baseline measure, and reassessed post-operatively at short- (1 month) and long-term follow-up (3 month). Patient compliance to voice rest instructions were controlled for using a subjective questionnaire and objectively using a voice dosimeter.

RESULTS:

This RCT is powered to detect a clinically significant threshold difference in the VHI-10 resulting in a sample size calculation of 20 patients per arm. An interim analysis reflecting the results obtained for the first 18 patients enrolled in the study with short-term follow-up will be presented. Eight patients were randomized to the control arm (0 days voice rest) and ten patients to the experimental arm (7 days voice rest). Statistical analysis for the entire cohort of patients showed a significant improvement in the mean VHI measured pre-operatively compared to post-operative assessments at 1 month follow-up (18.2 vs 7.8, p < 0.05). However, between group comparisons showed no significant difference in post-operative VHI at 1 month. Secondary outcome measures similarly yielded no significant difference in between group comparisons.

CONCLUSIONS:

Preliminary results show no significant benefit to post-operative voice rest.

Supervisor: Dr. Kevin Fung

THE EFFECTIVENESS OF TOPICAL COLLOIDAL SILVER IN RECALCITRANT CHRONIC RHINOSINUSITIS: A RANDOMIZED CROSSOVER CONTROL TRIAL

Dr. John Scott

BACKGROUND:

Recalcitrant chronic rhinosinusitis without polyposis (CRSsP) is a challenging condition to manage as traditional medical therapies and surgery fail to provide satisfactory clinical improvements. Colloidal silver (CS), a widely used naturopathic agent, has recently shown anti-biofilm properties both in vitro and within a rhinosinusitis animal model. To date, no trials involving humans have been published in world literature.

OBJECTIVE:

The purpose of this study was to assess the efficacy of CS as a topical nasal spray in patients with refractory CRSsP.

METHODS:

A prospective cohort study was conducted using a convenience sample of 20 randomized patients with crossover methodology, comparing nasal sprays with CS versus saline. Patients sprayed twice daily for six weeks with the first intervention and then switched to the second for the next six weeks, with measurements made at baseline and each time point. Primary outcomes were changes in SNOT-22 and Lund-Kennedy (LK) endoscopic scores. All analysis was non-parametric and was conducted using STATA 14.

RESULTS:

Twenty-two patients were enrolled in the study with 20 completing the entire protocol. Mean 6-week change in SNOT-22 scores were -2.8 and 1.0 for saline and CS, respectively (p=0.373). Similarly, mean 6-week change in LK scores were -1.4 and -1.1 for saline and CS, respectively (p=0.794). Significant period effects were observed with the SNOT-22 score between the randomized groups. No participants experienced negative health effects directly attributable to the administration of intranasal CS.

CONCLUSION:

Commercially available CS nasal spray did not demonstrate any meaningful subjective or objective improvements in patients with recalcitrant CRSsP.

Supervisors: Dr. Brian Rotenberg and Dr. Leigh Sowerby

CHALLENGES IN CUTANEOUS ONCOLOGY

Dr. Scott Hamilton

Distinguished Alumnus

Skin cancer is the most common malignancy in North America, with rates continuing to rise. Surgery remains the mainstay of treatment. For the vast majority of cases, treatment is unique in that it can be offered by many specialties.

Head and neck surgeons have seen an evolving role in this field over the past few decades. Even within our own specialty, though, there remains incredible variability in management.

So how do we remain leaders in care?

By following a patient through the entire skin cancer experience, we will identify common challenges in managing this disease. We will examine every step from diagnosis to discharge, with emphasis on reconstructive challenges relevant to the community – based surgeon.

An evidence – based approach will be used to create a pathway for optimized care. The future of our specialty's role in skin cancer management will be explored.

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Presented for the most impactful research project

Charles A. Thompson Plaque

PETER CHESKI INNOVATIVE RESEARCH AWARD

Presented for the most innovative research project

DEPARTMENT OF OTOLARYNGOLOGY – HEAD AND NECK SURGERY AWARD FOR PERFECT PITCH

Presented for the most eloquent presentation

RESIDENT BOOK AWARDS

Presented to residents who did not receive one of the above awards

SIMON KIRBY MOST CARING RESIDENT AWARD

Presented to the resident who demonstrates excellence in compassionate care

UNDERGRADUATE TEACHING AWARD

Presented to the resident with the highest teaching evaluation

SPONSORS

This program was supported in part by an education grant form the following:

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The Late Dr. Charles A. Thompson

The Late Dr. Peter Cheski

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CONTINUING PROFESSIONAL DEVELOPMENT PLANNING COMMITTEE MEMBERS

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Lorne Parnes

Kathryn Roth (Director)

Leigh Sowerby

John Yoo

ADMINISTRATIVE SUPPORT

Angelika Edwards

Ann Jones

Allison Berger

The Department of Otolaryngology – Head and Neck Surgery, Schulich School of Medicine and Dentistry, and Western University wish to thank the above persons.

NOTES
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THANK YOU FOR ATTENDING THE 43RD
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