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Department of Otolaryngology - Head and Neck Surgery

FORTY-FIRST ANNUAL

RESIDENTS' RESEARCH DAY

Friday, May 22, 2015
Kenny Theatre,
in the 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 not had in the past 2 years, a financial interest, arrangement or affiliation with one or more organizations that could be perceived as a direct/indirect conflict of interest in the content of the subject of this or any other program.

1. Anthony Nichols: None
2. Lorne Parnes: None
3. Kathryn Roth: None
4. Leigh Sowerby: None
5. John Yoo: None

Dr. Sujana Chandrasekhar

Distinguished Visiting Professor

Dr. Chandrasekhar completed her residency in Otolaryngology-Head and Neck Surgery at New York University Medical Center in New York. She then completed her fellowship in Otology and Neuro-otology at the House Ear Clinic and Institute in Los Angeles, California. She served on the full-time academic faculty of both UMDNJ-New Jersey Medical School and Mount Sinai School of Medicine before entering private practice in New York City in October 2004. She is currently Director of New York Otology, Director of Neurotology at the James J. Peters Veterans Administration Medical Center, Otologist/Neurotologist at the New York Head and Neck Institute, and voluntary faculty at Mount Sinai. As such, she is at the clinical forefront in management of disorders of hearing, balance, tinnitus, facial nerve, and lateral skull base, as well as cochlear and Baha implants. She is the medical director of the Vestibular Disorders Evaluation Clinic at the Bronx VA Hospital, a multidisciplinary team to rapidly and thoroughly assess and treat patients, especially those returning from active duty, with complex dizziness disorders.

Dr. Chandrasekhar's career interests include hearing loss, tinnitus, vertigo, skull base tumors and temporal bone histopathology. Since 1990, she has published several papers in otology and otolaryngology. She published a landmark paper on sudden hearing loss, and was vice-chair of the Academy Guidelines on sudden hearing loss. She is now a Consultant on the AAO-HNSF Guidelines Development Taskforce. Her research on intranasal surfactant for otitis media and Eustachian tube dysfunction is ground-breaking. She has built on that research to develop a company to commercialize the use of intranasal surfactant for OM and ETD. She has also written on, and is funded for, gender research in otolaryngology. Dr. Chandrasekhar was honored with the AAO-HNS's Distinguished Service Award in September 2006 and 2012,WIOS Helen Krause Trailblazer Award in 2012, and AMA Women Physicians Physician Mentor Recognition Award in 2013. She is Immediate Past Chair of the American Academy of Otolaryngology-Head and Neck Surgery Board of Governors.President-Elect, American Academy of Otolaryngology-Head and Neck Surgery

Her other main interest is in humanitarian outreach. She has led five groups of practitioners on medical/surgical missions to Nicaragua, and has delivered lectures and performed surgeries on several occasions in India, Brazil, Mexico, Colombia, and Venezuela. She is married with four children.

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Dr. Timothy Wallace

Distinguished Alumnus

Originally from Moncton, New Brunswick, Dr. Wallace completed his residency in Otolaryngology-Head and Neck Surgery at The University of Western Ontario in 2004. During his residency he became the recipient of the Best Resident Presentation (2004), the Innovative Research Award, along with the Undergraduate Teaching Award in 2003.

After his first year at the Cumberland Regional Health Care Center in Amherst, Nova Scotia, he was appointed Chief of Surgery. He is a consulting otolaryngologist for the Colchester East Hants Health Authority in Truro, Nova Scotia.

Dr. Wallace founded the Nova Scotia Council of Surgical Chiefs (evolving into the Nova Scotia Surgical Care Council), a high school co-op program with the regional hospital, and a provincial surgical program to maximize institutional capacity for patient care. In 2010, he became the youngest recipient of the Dr. William Grigor Award which recognizes the physician under 50 with the most outstanding contribution benefiting the health of Nova Scotians.

He is a member of numerous otolaryngologic academic societies, Past-President of the Eastern Canadian Otolaryngology Society (ECOS) and currently counsillor, Ward 4, for the Anglophone East School District Education Council, New Brunswick. Dr. Wallace is also an invited speaker and lecturer.

His research interests are in transantral endoscopic repair of the orbital floor (submitted new instrument for patent) along with intraoperative nerve monitoring in thyroid surgery.

On a personal note, Tim and his wife Kate are the proud parents of three children. After completing his first triathlon last summer, Tim is currently preparing for this summer's circuit. He also coaches youth basketball and soccer. Tim and his children have also become hobby aquarists with a 182 gallon salt water aquarium.

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DEPARTMENT OF OTOLARYNGOLOGY – HEAD AND NECK SURGERY
41st ANNUAL RESIDENTS' RESEARCH DAY PROGRAM

8:00 – 8:30	***COFFEE IN THE EXHIBITORS' AREA – Spriet Learning Commons***	
8:30 – 8:33	***WELCOME AND INTRODUCTION OF CPD DIRECTOR***	**Dr. John Yoo**
8:33 – 8:35	**Sponsor Acknowledgement**	**Dr. Kathryn Roth**

CHAIR – DR. BRIAN ROTENBERG

8:35 – 8:45	**Dr. Sandeep Dhaliwal**	Genomic Analysis of HPV- Related Oropharyngeal Cancer (Supervisor: Dr. Anthony Nichols)
8:45 – 8:55	*Interactive Discussion*	
8:55 – 9:05	**Dr. John Scott**	Factors determining referral patterns to Otolaryngology by General Practitioners (Supervisor:Dr.Leigh Sowerby)
9:05 – 9:15	*Interactive Discussion*	
9:15 – 9:25	**Dr. Matthew Harris**	The Reliability of the Reflux Finding Score in General Otolaryngology Practice.(Supervisor:Dr.Leigh Sowerby)
9:25 – 9:35	*Interactive Discussion*	
9:35 – 10:05	***COFFEE IN THE EXHIBITORS' AREA – Spriet Learning Commons***	
10:05 – 10:15	**Dr. Krupal Patel**	Detection of Circulating Tumor DNA in Thyroid Cancer Patients. (Supervisor: Dr. Anthony Nichols)
10:15 – 10:25	*Interactive Discussion*	
10:25 – 10:35	**Dr. Chandheeb Rajakumar**	Risk Factors for Acute Epiglottitis (Supervisor: Dr. Kevin Fung)
10:35 – 10:45	*Interactive Discussion*	
10:45 – 10:50	**INTRODUCTION of DR. TIMOTHY WALLACE**	**Dr. Kathryn Roth**
10:50 – 11:45	**Dr. Timothy Wallace**	Necessity: What does it really breed?
11:45 – 12:00	*Interactive Discussion*	
12:00 – 13:00	***LUNCH IN LABETT HALL***	

CHAIR – DR. KEVIN FUNG

13:00 – 13:10 ***WELCOME BACK***

Sponsor – Education Grant Support **Dr. Kathryn Roth**

13:10 – 13:20 **Dr. Winsion Chow** A literature review and economic model on the cost of flexible nasopharyngoscope decontamination in a community otolaryngology office. (Supervisor: Dr. Leigh Sowerby)

13.20 – 13:30 *Interactive Discussion*

13:30 – 13:40 **Dr. Jordan Glicksman** A prospective study of analgesic use and risk of incident tinnitus. (Supervisor: Dr. Gary Curhan)

13:40 – 13:50 *Interactive Discussion*

13:50 – 14:00 **Dr. Samantha Tam** Type 1 medialization thyroplasty versus office based injection vocal fold augmentation for unilateral vocal fold paralysis: A cost minimization analysis. (Supervisors: Drs. Kevin Fung and Leigh Sowerby)

14:00 – 14:10 *Interactive Discussion*

14:10 – 14:20 **Dr. David Yeh** Management of T1 Glottic Squamous Cell Carcinoma - Comparative outcomes between laser and radiotherapy treatment at London Regional Cancer Program. (Supervisor: Dr.Kevin Fung)

14:20 – 14:30 *Interactive Discussion*

14:30 – 14:35 **INTRODUCTION of DR. SUJANA CHANDRASEKHAR** **Dr. Lorne Parnes**

14:35 – 15:25 **Dr. Sujana Chandrasekhar** The ABCDs of Leadership in OHNS

15:25 – 15:40 *Interactive Discussion* **Dr. Kevin Fung**

15:40 – 15:50 **PRESENTATION OF AWARDS** **Drs. J. Yoo & M. Husein**

15:50 – 16:00 **CLOSING COMMENTS: Group Photo, Evaluation Form Completion**

ABSTRACTS IN SPEAKER ORDER

GENOMIC ANALYSIS OF HPV-RELATED OROPHARYNGEAL CANCER

Dr. Sandeep Dhaliwal

BACKGROUND:
Epidemiologic evidence points toward a rising trend in oropharyngeal cancers owing to HPV infection. It is clear that HPV-related disease is a distinct entity from traditional head and neck cancers. The purpose of this study was to analyze patient outcomes in this subset of patients over the last two decades at our institution.

METHODS:
Using the London Health Sciences Centre pathology database, we identified oropharyngeal cancers diagnosed between 1993 and 2013. Tissue microarrays were created using pre-treatment biopsy specimens and p16 testing was conducted. The study cohort was divided into four time periods: 1993–1999, 2000–2004, 2005–2009, and 2010-2014.

RESULTS:
Of 306 tumour samples identified, 195 (64%) were positive for HPV. The proportion of cases that were HPV-positive increased significantly from 1993-1999 to 2010-2014 (27% vs 82%, $p<0.001$). Moreover, 3 year disease-free survival (DFS) and 3 year overall survival (OS) for all patients diagnosed with oropharyngeal cancer has improved over this 20 year period (DFS: 44% for 1993-1999 vs 73% for 2005-2009, $p=0.017$; OS: 41% for 1993-1999 vs 74% for 2005-2009, $p=0.004$). When all factors were included in a multivariate analysis, only HPV status was predictive of patient outcomes.

CONCLUSION:
HPV-related oropharyngeal cancer has risen substantially over the last 20 years. Given the epidemiologic trends demonstrated in this study, HPV status will continue to be important from a public health and resource standpoint.

Supervisor: Dr. Anthony Nichols

FACTORS DETERMINING REFERRAL PATTERNS TO OTOLARYNGOLOGY BY GENERAL PRACTITIONERS

Dr. John Scott

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 GP's and Otolaryngology.

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 specialist. 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 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.

Supervisor: Dr. Leigh Sowerby

THE RELIABILITY OF THE REFLUX FINDING SCORE IN GENERAL OTOLARYNGOLOGY PRACTICE

Dr. Matthew Harris

OBJECTIVE:
Laryngopharyngeal reflux (LPR) is commonly encountered by the general Otolaryngologist – Head & Neck Surgeon, and can account for up to 15% of new consultations. Signs and symptoms may include globus, chronic cough, hoarseness and throat clearing, however these are non-specific. Objectively, pH probe monitoring remains the gold standard for diagnosis but this is not routinely utilized due to its invasiveness, variability, cost and inconvenience. Two commonly used clinical tools for the diagnosis of LPR are the Reflux Symptom Index (RSI) and Reflux Finding Score (RFS) but the correlation between the RFS and the RSI has been shown to be highly variable. The RFS consists of 8 endoscopic findings that are graded by the examiner and tabulated. This was developed and validated by two fellowship-trained laryngologists. The high degree of subjectivity in the RFS parameters may affect its reliability, particularly when used by Otolaryngologists without sub-specialty training in laryngology.

The primary purpose of this study was to determine the inter-rater reliability of the Reflux Finding Score, and its components, by non-laryngology trained Otolaryngologists.

METHODS:
102 adult patients presenting for consultation to academic Rhinology and General Otolaryngology practices were eligible for enrollment. Patients completed the RSI and a demographic questionnaire. Endoscopic photographs of the larynx were captured during routine nasopharyngoscopy. These were graded for laryngopharyngeal reflux by three blinded, non-laryngology trained, Otolaryngologists. RFS >7 and RSI >13 were considered positive. Fleiss' kappa (k) was used to measure inter-rater reliability.

RESULTS:
Inter-rater reliability for raw RFS score was poor ($k = 0.05$). When scores were interpreted as positive for LPR (RFS >7) or negative (RFS ≤ 7), inter-rater reliability was also low ($k = 0.39$). Agreement was poor for posterior commissure hypertrophy ($k = 0.09$), ventricular obliteration ($k = 0.17$), and vocal fold edema ($k = 0.18$). Agreement was fair for laryngeal erythema ($k = 0.22$), infraglottic edema ($k = 0.26$), diffuse laryngeal edema ($k = 0.26$) and moderate for thick laryngeal mucous ($k = 0.46$). When parameters with a 5-point scoring scale were simplified to either the presence or absence of severe findings, the strength of agreement for erythema, diffuse edema and posterior commissure hypertrophy did not improve. The presence or absence of severe vocal fold edema had good agreement between users ($k = 0.85$).

CONCLUSIONS:
The Reflux Finding Scale has poor inter-rater reliability as a diagnostic tool for non-laryngology trained Otolaryngologists. The presence of thick endolaryngeal mucous, and severe vocal fold edema, are reliably identified and may be used to help diagnose LPR. Given the prevalence of this condition in general Otolaryngology practice, further development of an endoscopic scoring system with good inter-rater reliability would be a useful clinical tool.

Supervisor: Dr. Leigh Sowerby

DETECTION OF CIRCULATING THYROID TUMOR DNA IN THYROID CANCER PATIENTS

Dr. Krupal Patel

BACKGROUND:
Studies in other cancers have shown that the detection of circulating tumor DNA (ctDNA) in cancer patients can serve as an ultra-sensitive test of disease status. Unlike most malignancies, the majority of well differentiated thyroid cancers (~80%) have either a specific fusion (RET/PTC or PAX8/PPARgamma) or hotspot mutations in well described oncogenes (BRAF, RAS, PIK3CA). Thus a rather small panel of mutations can be tested for in plasma samples as a screening and surveillance test for a large fraction of thyroid nodules to determine their status of benign or malignant and save the patient from having thyroidectomy. Although well described in other cancers, ctDNA has largely not been investigated in thyroid disease with the exception of a pilot study that evaluated only BRAF mutations. The purpose of this study was to determine the ability to detect circulating thyroid cancer DNA in the plasma of patients with thyroid cancer.

METHODS:
We obtained patient samples pre-operatively and one month post-operatively. Quantitative-PCR was done to determine the levels of BRAF (V600E) gene pre-operatively and post-operatively. These were compared to formalin fixed tumor samples.

RESULTS:
Total of 39 pairs of preoperative, postoperative and FFPE samples were collected and analyzed. 11 patients had benign thyroid nodules on final pathology, 18 had classical papillary thyroid cancer, 9 had non-classical papillary thyroid cancer, and 3 had follicular thyroid cancer. Total of 7 (17.9%) patients had detectable BRAF mutations preoperatively and 6 of them had no detectable mutations post-operatively while one of the patients had a significant decline in the mutation levels. 4/7 (57.14%) patients had detectable mutations preoperatively and in the FFPE tumor samples, while 3/7 (42.8%) patients had detectable mutations preoperatively but not in the corresponding FFPE tumor samples. For classical papillary thyroid cancer group, 5/18 (27.8%) patients had detectable BRAF mutation in preoperative plasma and decrease in the postoperative plasma. 1/5 (20%) patient had detectable mutation preoperatively but not in the FFPE tumor sample. For benign thyroid nodules, 2/11 (18.2%) had detectable BRAF mutation in preoperative plasma and both patients had no detectable mutations post-operatively. These 2 samples did not have detectable mutations in their FFPE tumor samples either.

CONCLUSION:
Although, BRAF mutations were seen in both tumor and benign samples, drop in circulating BRAF mutations preoperatively and post-operatively in all cases suggest its utility as a tumor marker.

Supervisor: Dr. Anthony Nichols

RISK FACTORS FOR ACUTE EPIGLOTTITIS

Dr. Chandheeb Rajakumar

OBJECTIVE:
To determine demographic characteristics, presenting symptoms, treatment patterns, and outcomes among adult patients admitted to hospital in our centre for acute epiglottitis or supraglottitis.

METHODS:
A retrospective chart review was conducted. Records were reviewed for adult patients with the diagnosis of acute epiglottitis admitted in London, Ontario over the last 10 years (2005-2014) at three hospital sites.

RESULTS:
A total of 135 patients were admitted with this diagnosis. Average age was 50. There was a slight male predilection. Only five patients were admitted multiple times for acute epiglottitis. The remaining patients were only admitted a single time. A small proportion of patients required intensive care unit admission. The majority of patients were admitted to observed units. Odynophagia was the most common presenting symptom, followed by voice change, fever, and stridor. Inability to handle secretions, inability to lie flat, and otalgia were less common. Most patients were treated with a 24 hour course of intravenous corticosteroid as well intravenous clindamycin and ceftriaxone. Amoxicillin-clavulinate or clindamycin, with or without a second or third-generation cephalosporin, were the most common oral antibiotic choices for stepdown therapy. Awake intubation occurred in a small proportion of patients. Necessity for a surgical airway and death were very uncommon.

CONCLUSIONS:
Acute epiglottitis is common in our centre, with 10-15 admissions per year. It is typically managed with inpatient admission and intravenous antibiotics and steroids, as well as close observation. Some patients require intensive care unit admission and occasionally intubation is required for airway security, but establishment of a surgical airway and death are rare.

Supervisor: Dr. Kevin Fung

WHAT IS NECESSITY – WHAT DOES IT REALLY BREED?

Dr. Timothy Wallace

Necessity is truly in the eye of the beholder. Powers of observation and insight to look at not only what IS but what WILL BE important personally, and for the system at large, are developed by experiences gleaned from one's (or colleagues') successes and failures.

Although starting a practice may seem relatively straightforward after speaking with colleagues, one's perception of strategy is challenged by unique circumstances. Defining who you are and who you want to become involves defining the essence of necessity which inevitably breeds not only invention, as the age old adage suggests, but also intervention and innovation on many levels, personally and professionally.

Sharing experiences such as starting a specialty practice in a small regional health care model; becoming Chief of Surgery and Anaesthesia within first year of practice, building mutually beneficial relationships within the professional/provincial community, forming partnerships with industry (ie. TNE) and being humbled by various obstacles personally and professionally.

I aspire to provide some insight and possibly some colorful anecdotes for those who are present. Lessons learned while identifying "necessity" is one of the foremost challenges facing all physicians/surgeons today no matter at what point in their career.

A LITERATURE REVIEW AND ECONOMIC MODEL ON THE COST OF FLEXIBLE NASOPHARYNGOSCOPE DECONTAMINATION IN A COMMUNITY OTOLARYNGOLOGY OFFICE

Dr. Winsion Chow

OBJECTIVE:
Nasopharyngoscopy has become an essential component of the complete head and neck physical examination. The same nasopharyngoscope can be used several times during a busy day in clinic. As such, proper and efficient decontamination procedures are essential to prevent iatrogenic decontamination while minimizing disruption in the timely care of patients. Moreover, nasopharyngoscopes and the associated decontamination costs are a significant financial expense for community Otolaryngology offices. The objectives of the current study are: 1) Literature review of nasopharyngoscope reprocessing, guideline recommendations and to describe the risk of iatrogenic infection, 2) Provide an economic model for various decontamination methods in a community based Otolaryngology practice.

METHODS:
Three separate literature searches were performed using Google Scholar, MEDLINE and EMBASE databases from January 1, 1995 to January 12, 2015 to capture information on methods of decontamination, risk of iatrogenic infection and cost analysis published in literature. This information was then used to create economic models with different decontamination methods.

RESULTS:
Currently utilized decontamination methods include glutaraldehyde, ortho-phthalaldehyde, peracetic acid, hydrogen peroxide, chlorine dioxide and endoscopic sheaths. There is no evidence to suggest differences in the efficacy of decontamination between these various agents. Current Canadian guidelines are extrapolated from endoscopes with working channels used in higher-risk areas of the body, and likely do not accurately represent the risk presented by nasopharyngoscopes. From the available evidence, the risk of iatrogenic transmission is actually exceedingly rare. A simple economic model highlights the significant financial expense of various decontamination systems.

CONCLUSION:
This study provides a descriptive review of the available decontamination options to which there are no differences in their efficacy. The actual risk of iatrogenic infectious contamination is very low. Despite the aforementioned, there currently lacks specific guidelines for nasopharyngoscopy decontamination to direct clinical standards. In turn, this lack of direction can have significant financial implications on Otolaryngology practices.

Supervisor: Dr. Leigh Sowerby

A PROSPECTIVE STUDY OF ANALGESIC USE AND RISK OF INCIDENT TINNITUS

Dr. Jordan T. Glicksman

BACKGROUND:
The three most commonly used medications in the United States are analgesic drugs. While it is known that high doses of aspirin cause reversible tinnitus, the association between typical intake of ibuprofen, acetaminophen, aspirin and the incidence of tinnitus have not been evaluated. We prospectively evaluated the association between aspirin, ibuprofen and acetaminophen use and tinnitus in a female cohort.

METHODS:
Participants were 60,185 women in the Nurse's Health Study II, aged 30-44 years and without tinnitus at baseline in 1991, who completed questionnaires about lifestyle and medical history every two years and food frequency questionnaires every four years. Information on self-reported tinnitus and date of onset was obtained from the 2009 questionnaire, with cases defined as those reporting experiencing symptoms "a few days/week" or "daily." Multivariable adjusted hazard ratios (HRs) were calculated using Cox proportional hazards regression models.

RESULTS:
There was no significant association between frequency of aspirin use and the incidence of tinnitus (p for trend =0.92). There was a significant positive association between frequency of ibuprofen use and the incidence of tinnitus (p=0.001). This association varied with age (p <0.001). There association was significant below the age of 50 (p for trend = 0.01) but not for women 50 and older (p for trend = 0.95). There was a significant positive association between frequency of acetaminophen use and the incidence of tinnitus (p=0.001). This did not vary by age.

CONCLUSION:
More frequent acetaminophen use and more frequent ibuprofen use are associated with higher risk of tinnitus, whereas aspirin use is not.

Supervisor: Dr. Gary C. Curhan, Harvard School of Public Health

TYPE 1 MEDIALIZATION THYROPLASTY VERSUS OFFICE BASED INJECTION VOCAL FOLD AUGMENTATION FOR UNILATERAL VOCAL FOLD PARALYSIS: A COST MINIMIZATION ANALYSIS

Dr. Samantha Tam

BACKGROUND:
Unilateral vocal fold paralysis has many causes, including trauma, iatrogenesis, malignancy, or stroke. Traditionally, Type 1 medialization thyroplasty has been used to treat the sequelae of aspiration and hoarseness. This procedure is typically performed in the operating room under neurolept anaesthesia. Injection laryngoplasty is an alternative technique, which aims to augment the vocal fold with a filler material, also achieving medialization of the vocal fold. More recently, the percutaneous approach has been developed and can be safely performed in the outpatient office setting under local anaesthesia. However, injection materials are temporary and patients may require multiple procedures. The purpose of this study is to compare the cost of Type 1 medialization thyroplasty versus office-based injection laryngoplasty.

METHODS:
This economic evaluation employs a decision tree analysis. A cost minimization analysis was conducted, as the two treatment options have comparable effectiveness base on existing studies. A societal perspective was utilized. Probabilities were accrued from a combination of literature and a patient database from this institution. Costs were obtained from the institutional costs and population statistics. Multiple sensitivity analyses were completed on our dataset. The time horizon used was 5 years.

PRELIMINARY RESULTS:
This institution retrospectively reviewed 95 patients with unilateral vocal fold paralysis. Fifty-three patients were initially treated with injection laryngoplasty and 42 patients underwent initial medialization thyroplasty. Medialization thyroplasty had a total cost of $1677.96. Injection laryngoplasty had a total cost of $1314.66. Incremental cost was $363.30.

CONCLUSION:
Our preliminary results suggest that initial treatment with injection laryngoplasty is more cost effective than initial treatment with medialization thyroplasty in patients with unilateral vocal fold paralysis over a 5 year period.

Supervisors: Drs. Kevin Fung and Leigh Sowerby

MANAGEMENT OF T1 GLOTTIC SQUAMOUS CELL CARCINOMA – COMPARATIVE OUTCOMES BETWEEN LASER AND RADIOTHERAPY TREATMENT AT LONDON REGIONAL CANCER PROGRAM

Dr. David Yeh

BACKGROUND:
T1 glottic squamous cell carcinomas (SCC) can be treated with either radiotherapy (RT) or transoral laser microsurgery (TLM). Previous studies have demonstrated equivalent tumour control between both the modalities. RT might have better voice outcomes compared to TLM, however patients with TLM might have a better rate of laryngeal preservation. This study aims to evaluate the outcomes of patients between the two modalities in a single, large volume institution, as well as provide details analysis of the differences between the two treatment modalities.

METHODS:
A retrospective review of all consecutive patients with T1 glottic SCC treated at the London Regional Cancer Program from 2000 to 2013. Data were extracted from chart reviews. Tumour control and survival outcomes were calculated from the time of diagnosis to the time of event. Laryngectomy free survival (LFS) were calculated from the time of diagnosis to the time of laryngectomy or time of tumour related death. The actuarial survival were analysed with Kaplan Meier's methods and differences analysed with log-rank test.

RESULTS:
A total of 173 cases of T1 glottic cancer were included in the study (57 TLM, 116 RT). 55 patients with T1a SCC were treated with RT and 53 with TLM; and 61 patients with T1b SCC were treated with RT and 4 with TLM. Patients with T1a SCC treated with TLM have higher local recurrence rate (5 year local control 77% vs 88% for TLM vs RT respective, p=0.023). The median time to recurrence was 8.87 months (4.17 – 67.25) and 21.29 months (7.79 – 82.53) respectively (p=0.69). Patients treated with TLM required repeated laser re-excision for either involved margin (15.5%) or recurrent tumour (23.6%). Mean number of laser surgery for these patients was 1.7. Three of these patients (5.7%) required salvage with radiotherapy. All T1a patients that were treated with laser surgery initially were able to retain their larynx. The 5 years LFS were 100% vs 82% (p=0.015). Most patients with T1b SCC were treated with RT (61/65 (93.8%)), with a 5-year local control rate of 89%. Of the 4 patients treated with laser surgery, 2 required repeated surgery, 1 required adjuvant radiotherapy due to unclear margin and difficult surgery access, and 1 had early recurrence and was salvaged with concurrent chemoradiotherapy. The 5 year overall survival and disease specific survival for T1a was 87% and 100% vs 87% and 97% for TLM vs RT respectively (p=0.887, p=0.384). For T1b, the overall survival and disease specific survival was 50% and 100% vs 86% and 96% for TLM vs RT respectively (p=0.268, p=0.820).

CONCLUSION:
Patients with T1 glottic SCC treated with RT or TLM have similar overall survival and disease specific survival. Patients with T1a tumour treated with TLM had better laryngeal preservation compared to RT; however, these patients require closer surveillance as they have a higher rate of local recurrence requiring repeated procedures, and some require salvage with adjuvant radiotherapy.

Supervisor: Dr. Kevin Fung

The ABCDs OF LEADERSHIP IN OHNS

Sujana S. Chandrasekhar, MD, FACS

Much has been written on Leadership – books, blogs, essays, etc. – trying to help individuals position themselves on a leadership track. My path, on the other hand, has been almost fortuitous. When I reflect back on the 29 years since I graduated from medical school, I think about the decisions that I made that served me well, and those that served me poorly.

At the core of becoming a leader in Otolaryngology, whether as an academic chair, a leader in private practice, chair of a committee, or moving up into leadership at your local, regional, national or international society, lay the following four tenets: Academic excellence, Building relationships, Completing commitments, and Diversity of thought and of teams.

I will explore these ideas and share my stories, as I hope to give you thoughts on which you may reflect as you shape your career path.

AWARDS & PRIZES

SCIENTIFIC ACHIEVEMENT AWARD:

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.

Continuing Professional Development Planning Committee

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

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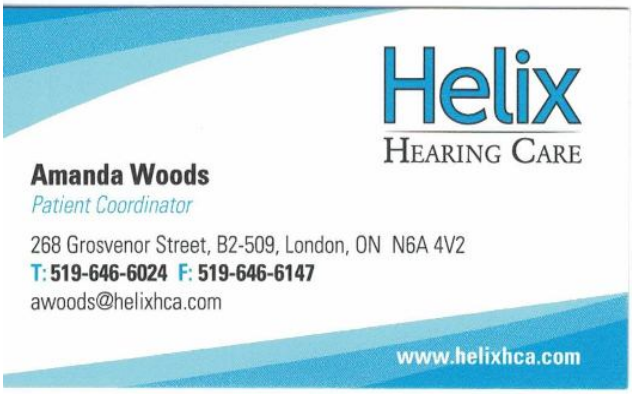

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