

Selected Abstracts

Annual Scientific Meeting Australian Society of Otolaryngology Head and Neck Surgery March 27–31, 2010 Sydney Australia

**Presenting author*

(1) Evolution of Management for Long Segment Tracheal Stenosis

Alan Cheng *The Children's Hospital at Westmead, New South Wales*

This presentation describes the evolution of management of congenital tracheal stenosis with complete tracheal rings in the last 14 years. It recounts the philosophy of treatment as seen at the Children's Memorial Hospital in Chicago to the current-day experience at The Children's Hospital in Westmead, Australia. It examines the etiology and presentation of these cases, the selection criteria toward treatment, the surgical management employed, and the need for a team approach in managing this difficult condition, which may have rewarding consequences. It highlights current knowledge concerning mucosal healing, the use of balloon dilatation of the airway, CPAP, and mitomycin C for recurrent cicatrization of the tracheal airway.

(2) Intracapsular Tonsillectomy 2009

Max M April,* Robert F Ward *Weill Cornell Medical College, New York*

BACKGROUND: Intracapsular tonsillectomy with a micro-debrider, as described in 2000 by Koltai, has been practiced by our group for nine years. Our experience with this technique, including indications and Results, will be presented.

METHODS: Retrospective chart review of 1000 patients.

RESULTS: Number of postoperative bleeds (including none necessitating a second operative procedure), number of children with regrowth requiring a completion tonsillectomy, number of patients with VPI, and number of peritonsillar abscesses after surgery will be presented.

CONCLUSION: Intracapsular tonsillectomy is a safe and effective technique, with minimal postoperative management necessary.

(3) Oropharyngeal Cancer: Then and Now

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BACKGROUND: Oropharyngeal cancer has traditionally been treated with surgery followed by radiotherapy. A retrospective analysis has been carried out on patients who have

been treated with surgery followed by radiotherapy. A retrospective analysis has been carried out on patients who have been treated with this method. New techniques with chemoradiotherapy with PET scanning have been involved in the treatment of this disease, with good functional and survival Results. Both Methods will be compared and contrasted.

METHODS: There will be over 100 patients in each group that have been analyzed, compared, and contrasted on the survival rates, quality of life, and complication rates between the two modalities of treatment.

RESULTS: The Results will comprise survival figures, paying particular attention to the quality of life issues such as swallowing, speech, and complications, where we will be able to make valid comparisons between the two Methods.

CONCLUSION: This material will be presented so that the persons treating this disease will make their own conclusions on the cost, survival, and quality of life issues that will be discussed in the paper.

(4) Transoral Robotic Surgery in the Treatment of Head and Neck Cancer Patients: Initial Experience at the Royal Adelaide Hospital

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BACKGROUND: Head and neck surgical cancer treatment is often hampered by access to the primary site. This may involve a mandibulotomy or lingual release prior to removal of the malignancy. This Results in significant morbidity to the patient. As a result, there has been a trend toward "organ preservation" therapy for the treatment of these tumors. The Da Vinci Robotic machine has a high-resolution 3D camera and distally articulated endoscopic instruments that mimic the range of motion of the human hand and wrist. This has now allowed previously inaccessible tumors to be removed transorally, with minimum postoperative dysfunction. This study looks at the feasibility and safety of using the robotic system for head and neck cancer patients at the Royal Adelaide Hospital.

METHODS: Data were prospectively collected from head and neck cancer patients sourced from August 2008, from the Royal Adelaide Hospital Multidisciplinary Head and Neck clinic. As part of their treatment, they received tumor removal transorally with the Da Vinci Robotic system.

RESULTS: Twenty patients were treated with the Da Vinci Robotic system. The initial lengthy set-up time was reduced to 14 minutes by the last five patients. There were no intraoperative complications. Its safety profile was excellent. Immediate functional outcomes prior to starting adjuvant therapy were found to be essentially normal.

CONCLUSION: The data confirm the feasibility of using the

Da Vinci Robotic system in the treatment of head and neck cancer. Its unique characteristics allow the safe extirpation of previously inaccessible tumors via the transoral route in an expedient fashion and with minimal postoperative dysfunction.

(5) Processes and Outcomes of Head and Neck Cancer Patients from Geographically Disparate Regions of the UK: A Comparison of Scottish and English Cohorts

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AIM: The aim of this paper was to compare demographics, treatment, and outcomes from two large prospective audits of head and neck cancer patients in two disparate regions of the UK.

METHODS: In the Scottish Audit of Head and Neck Cancer (SAHNC), a total of 1910 patients with new head and neck cancers were registered in a two-year period, from September 1999, to August 2001. The South and West Audit of Head and Neck Cancer (SWAHN) was carried out in three phases, between 1996 and 2002, with a total of 2050 cases.

RESULTS: There were more men in SAHNC than SWAHN (71% vs 67%, $P < 0.01$), and patients in SAHNC presented at a younger age (76% aged 45-74 compared with 64%, $P < 0.001$). Significantly more patients in Scotland had advanced (stage III/IV) laryngeal cancer (44% vs 30%, $P < 0.001$). The overall disease-specific five-year survival was 54.5 for SAHNC and 54.2 for SWAHN.

CONCLUSION: This comparison of large head and neck cancer cohorts provides important data to base UK head and neck cancer care and hypotheses regarding pathogenesis and the effects of treatment processes. Given the heterogeneity in disease, patient, and healthcare characteristics between the two regions, the similarities in survival and process outcomes are striking.

(6) Patient Outcomes Following Intervention for Obstructive Sleep Apnea: Multi-level Surgery, Mandibular Advancement Splints, and CPAP Compared

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BACKGROUND: The most appropriate treatment for patients with obstructive sleep apnea (OSA) is controversial. CPAP is established as the mainstay of treatment, with surgery being reserved for patients who reject or are intolerant of CPAP. We have recently published long-term quality of life (QOL) outcomes for multi-level surgery in a 2003/4 cohort, showing no

difference to CPAP. However, current surgical techniques have evolved to include more frequent use of mucosal preserving tongue reduction surgery; therefore, outcomes of contemporary techniques may be different. In addition, mandibular advancement splints (MAS) are now frequently used in contemporary sleep medicine.

METHODS: We studied consecutive, simultaneously treated 2007 cohorts of 240 patients undergoing CPAP, MAS, and current multi-level surgery treatment of OSA. Quality of life, Epworth sleepiness score, and snoring severity scores were obtained for all patient groups.

RESULTS: Outcomes were similar among CPAP, MAS, and surgical groups ($P = NS$).

CONCLUSION: Multi-level surgery for sleep apnea produces good patient outcomes, which are comparable to those obtained with device therapy. Patients with inadequate device compliance should be evaluated for contemporary multi-level surgery, and a multi-disciplinary approach allows optimal treatment of patients with OSA.

(7) Hearing Preservation, Facial Nerve Outcomes and Recurrent Tumor Rate in Retrosigmoid Acoustic Neuroma Surgery: Results of a Prospective Case Study

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H Gorman

OBJECTIVE: To analyze hearing preservation, facial nerve Results, and the complication rates in a consecutive series of patients undergoing retrosigmoid excision of acoustic neuroma.

STUDY DESIGN: Prospective case series of patients undergoing retrosigmoid approach acoustic neuroma surgery where starting to analyze hearing preservation, facial nerve Results, and the complication rates in a consecutive series of patients.

SETTING: All patients undergoing retrosigmoid excision of acoustic neuroma by the senior surgeon, referred to the East Melbourne ENT Head and Neck Clinic between 1987 and 2008, were included in the study. All patients underwent surgery with hearing preservation as a goal of surgery, regardless of preoperative hearing level and tumor size or location.

OUTCOME MEASURES: Outcome measures were pre and post audiology, tumor size CPA extension outside the IAC, operative details, complications, facial nerve outcomes, and recurrence rates.

RESULTS: A total of 290 patients were included in this series. Fourteen percent of all patients retained hearing at a serviceable level (Class A or B), and 28 percent had measurable hearing (Class A, B, or C). In those patients with < 30 mm CPA extension, and Class A or B preoperative hearing, 21 percent of these patients retained serviceable hearing. Even in patients with tumors between 11 to 30 mm of CPA extension, 18 percent of these patients had serviceable hearing preserved,