

AUSTRALIAN & NEW ZEALAND Head and Neck Society 10th Annual Scientific Meeting

HEAD & NECK 2008

TRANSLATION & COMMUNICATION

HILTON ON THE PARK MELBOURNE 4 - 6 September



SCIENTIFIC PROGRAMME



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WELCOME MESSAGE FROM THE PRESIDENT OF THE ANZHNS AND CONVENER OF THE 10TH ANNUAL SCIENTIFIC MEETING – JUNE CORRY

Dear Colleagues,

The Australian and New Zealand Head and Neck Society extends a warm welcome to delegates attending the 10th Annual Scientific Meeting at the Hilton on the Park, Melbourne.

The convening committee, led by myself and Andrew Coleman (Chair of the Scientific Sub Committee), has put a great deal of effort into formulating a stimulating scientific programme, with evidence based medicine underpinning the conference theme of *Communication and Translation*. We value fostering not only professional interdisciplinary interaction, but social interaction as well. We trust you will enjoy the social programme organised by David Wiesenfeld and Alison Perry.

We welcome and thank our distinguished international speakers, **Professor Gregory Wolf, Professor Paul Harari and Professor Cathy Lazarus**, and we look forward to their presentations. They will be supported by a multi-disciplinary faculty of local experts. I would also like to thank our South East Asian colleagues, Professors Daniel Chua, Soehartati Gondhowiardjo and Khee Chee Soo, for their participation.

There will be prizes for the best allied health paper, the best oral presentation for submitted abstracts and the best poster presentation.

We would like to take this opportunity to thank our sponsors and exhibitors who have contributed to this meeting, and urge the delegates to view the industry exhibition.

It is the tenth meeting of the ANZHNS and the society has performed very well over that time in fostering professional interdisciplinary respect and collegiality. I think it is now time to consider how we should position ourselves for the future. As a group we have a huge collective experience in head and neck cancer, and I urge you all to consider how we can best engage the membership to work together towards an even bigger and brighter future for the ANZHNS.

Best wishes

June Corry President and Convener



ANZHNS EXECUTIVE

Members of the Executive Committee:

President	Dr June Corry, Radiation Oncologist, Melbourne			
Vice President	Dr Swee Tan, Surgeon, Lower Hutt, New Zealand			
Secretary	Dr David Wiesenfeld, Surgeon, Melbourne			
Treasurer	Dr Gary Morgan, Surgeon, Sydney			
Executive	Dr Lyndell Kelly, Radiation Oncologist, Dunedin, New Zealand			
	Dr Christopher Milross, Radiation Oncologist, Sydney			
	Dr Ben Panizza, Surgeon, Brisbane			
	Prof Alison Perry, Speech Pathologist, Melbourne			
	Dr Sandro Porceddu, Radiation Oncologist, Brisbane			
	Dr Guy Rees, Surgeon, Adelaide			

Immediate Past President Dr Suren Krishnan, Surgeon, Adelaide

AUSTRALIAN AND NEW ZEALAND HEAD & NECK SOCIETY (ANZHNS)

Early in 1998, a number of head and neck oncologists from the disciplines of surgery, radiation oncology and medical oncology met in Sydney to discuss the feasibility of establishing a multidisciplinary head and neck society. A working party was formed and following a number of meetings, invitations were sent to individuals in these three specialties to become foundation members of the Australian and New Zealand Head and Neck Society.

The initial business meeting was held on 9 December 1998 and at that time there were 60 foundation members. The Society adopted as its Constitution the Model Rules for Associations published by the Department of Fair Trading in NSW and the members agreed that their principal objectives would be to promote the practice of head and neck oncology, to educate medical colleagues and the public about our specialty, to foster research and to seek optimal treatment outcomes for our patients.

ORGANISING COMMITTEE

Dr June Corry – Convener Dr Andrew Coleman – Chairman, Scientific Committee Dr Lisa Crighton Dr Damien Grinsell Dr Anthony Guiney Professor Alison Perry Dr Ben Solomon Dr David Wiesenfeld



HEAD & NECK 2008 4 - 6 September

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GENERAL INFORMATION

Date & Venue

Head & Neck 2008 will be held at the Hilton on the Park Melbourne from Thursday 4 September to Saturday 6 September 2008.

Registration

The registration desk is located in the UpperFoyer, Level 1. Registration opening times are:Thursday 4 September1200 – 1800Friday 5 September0730 – 1800Saturday 6 September0730 – 1700

Registration Entitlements

Registration includes:

- Access to all scientific sessions
- Final book of proceedings
- · Luncheons on nominated days/s
- · Morning and afternoon tea on nominated day/s
- Entry to Industry Exhibition
- Head and Neck 2008 Welcome Cocktail Reception
- Head and Neck 2008 Conference Dinner

Industry Exhibition

The Industry Exhibition is located in the Upper Foyer, Level 1. Delegates are encouraged to view the Exhibition as the Industry has made a significant contribution to the Meeting.

Refreshment Breaks

All lunches and morning and afternoon teas will be served in the Industry Exhibition area.

ANZHNS Executive Meeting

A meeting of the ANZHNS Executive will be held on Thursday 4 September at 11.00am in Boardroom 2, Level 1.

Speaker's Support

All presenters must report to speaker support before the beginning of your session for presentation uploading. The speakers support desk is located in the Upper Foyer, Level 1. Binh Nguyen will be available to assist you with your presentation.

Evaluation Form

An Evaluation Form which is a requirement for some Societies/Groups to obtain CME points, can be found in your satchel. Please complete this form and return to the registration desk. The ANZHNS value your feedback.

Social Program

Thursday 4 September Welcome Cocktail Reception with the Industry 5.45pm to 7.45pm, Upper Foyer, Level 1 Dress: Smart Casual

Friday 5 September Conference Dinner Ballroom 3, Hilton on the Park Melbourne 7.00pm Pre Dinner Drinks for a 7.30pm start Dress: Lounge Suit

CME/CPD Points

Attendance certificates can be requested at the registration desk or after the meeting via email at conferences.events@surgeons.org.

Dental Practice Board of Victoria

Activity approved for up to 15.5 hours of clinical and/or scientific CPD credit. Please note approval of an activity for CPD purposes does not imply that the Dental Practice Board of Victoria endorses the activity or agrees with the opinions of the presenter/s.

Royal Australasian College of Surgeons

Fellows can claim 20 points in Category 4: Maintenance of Clinical Knowledge and Skills

Meeting Organiser

Conferences & Events Department Royal Australasian College of Surgeons College of Surgeons' Gardens Spring Street Melbourne, Victoria, 3000 T: 03 9276 7431 E: conferences.events@surgeons.org



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Head & Neck 2008

INTERNATIONAL GUEST SPEAKERS



Professor Paul Harari

Professor & Chairman, Department of Human Oncology University of Wisconsin School of Medicine & Public Health Wisconsin, USA

Dr. Paul M. Harari is the Jack Fowler Professor and Chairman of the Department of Human Oncology at the University of Wisconsin School of Medicine and Public Health. Dr. Harari earned his Bachelors degree at Tufts University (1980)

and Medical degree at the University of Virginia (1984). He completed his Internal Medicine Internship at the University of California Davis and Radiation Oncology Residency at the University of Arizona (1990). His clinical and laboratory research interests focus primarily on treatment advances for head and neck cancer patients with emphasis on the interaction of molecular growth inhibitors combined with radiation. He serves as the Principal Investigator for a series of federal and industry sponsored research grants that examine the interaction of molecular growth inhibitors with radiation. His research program engages both clinical and laboratory postdoctoral fellows (MD and PhD), pre-doctoral dissertators, medical students, undergraduate students and technical personnel. Dr. Harari serves as current Chairman of the ASTRO Education Committee and on the ASCO Education and Program Committees. He has directed the Radiation Oncology Residency Training Program at the University of Wisconsin since 1997. Dr. Harari has authored over 140 original research articles and book chapters that relate primarily to cancer research and the treatment of head and neck cancer.



A/Professor Cathy Lazarus

Associate Professor, Department of Otolaryngology NYU School of Medicine & NYU Hospitals Center New York, USA

Cathy Lazarus, Ph.D., CCC-SLP, BRS-S, is Assistant Professor in the Department of Otolaryngology, New York University School of Medicine and Director of Hearing and Speech, Bellevue Hospital Center. Dr. Lazarus has been conducting

swallowing research for several years. Her interests include swallowing in head and neck cancer patients and swallow treatment. She currently has an NIH funded grant examining the effects of two exercise programs on tongue function and swallowing in oral cancer patients treated with radiotherapy +/- chemotherapy. Dr. Lazarus has served on several ASHA committees. She was a Councilor on the Board of the Dysphagia Research Society and is a Charter Member of Board Specialty Recognition in Swallowing and Swallowing Disorders.



Professor Gregory Wolf

Professor, Department of Otolaryngology A. Alfred Taubman Health Care Center Michigan, USA

Gregory Wolf, M.D., F.A.C.S., is Chair of the Department of Otolaryngology – Head and Neck Surgery at the University of Michigan Medical Center in Ann Arbor, MI. He has served on numerous institutional committees including

two terms as a Director of the Faculty Group Practice and has served as Councilor for the Advisory Council of the NIDCD, NIH. Dr. Wolf has been the principal investigator for numerous research efforts and clinical trials in the treatment of head and neck cancers, including the landmark national Veteran's Affairs Cooperative Study for organ preservation in advanced laryngeal cancer which created a revolutionary change in the management of these cancers. He has authored over 200 original research articles and book chapters and has been an invited speaker at countless regional, national, and international symposiums. He was President of the American Head and Neck Society (2007-2008). He is the recipient of numerous awards including the Presidential Citation from the American Head and Neck Society in 2002, the Triological Society Vice-Presidential Citation in 2006 and the Honor Award from the American Academy of Otolaryngology-Head and Neck Surgery in 1988, as well as multiple citations in Best Doctors in America and Who's Who in the World. Dr. Wolf has dedicated his life to the care of patients and has been one of the most influential physician scientists in the history of head and neck cancer surgery.



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Scientific Programme





THURSDAY 4 SEPTEMBER 2008

11:00 Executive Committee Meeting

SCIENTIFIC PROGRAMME

All conference sessions and the industry exhibition will be held at the Hilton on the Park Melbourne. All presenters are asked to allow 25% of their allocated time to questions from the floor.

12:55 13:20	Convener's welcome and President's address Keynote address - <i>Professor David Currow</i> - Chief Executive Officer of Cancer Australia				
13:30 – 15:08	SESSION 1 - VISIONS OF THE EXPERTS Sponsored by Merck Sorono Session Moderator: June Corry				
13:30	Personalizing H&N Cancer Therapy 2008: Are We Succeeding? - Paul Harari Sponsored by Merck Sorono				
14:03	Rehabilitating H&N cancer patients: The evidence is not that hard to swallow - Cathy Lazarus				
14:36	Organ Preservation for Advanced Laryngeal Cancer: State of the art - 2008 - Gregory Wolf				
15:09 - 15:39	Afternoon Tea with the Industry				
15:40 – 16:12	SESSION 2 - EARLY LARYNX CANCER Session Moderator: Alison Perry				
15:40	Management of early glottic cancer - The Surgeon's perspective - Suren Krishnan				
15:46	Management of early glottic cancer - The Radiation Oncologist's perspective - Sandro Porceddu				
15:52	Case studies, panel discussion and questions from the floor regarding early larynx cancer - Suren Krishnan, Sandro Porceddu, Nadine Manison				
16:13 – 17:45	SESSION 3 - ADVANCED LARYNX CANCER Sponsored by Varian Medical Systems VARTAN Apartner for life Session Moderator: Russell Corlett				
16:13	Voice rehabilitation following laryngectomy - Alison Perry				
16:22	Surgical Speech Restoration (SSR) [works if you know what you are trying to do] - Tony Cheesman				
16:40	Surgery for locally advanced larynx cancer - Stephen Kleid				
16:49	Questions from the floor regarding voice reconstruction				
17:00 – 17:45	Pharyngeal reconstruction techniques following laryngectomy Literature Review & Panel Discussion				
17:00	Gastric pull up - Bernie Lyons				
17:09	Free Jejunum - David Thiele				
17:18	Tube Flap - Damien Grinsell				
17:27	Case studies, panel discussion and questions from the floor regarding pharyngeal reconstruction				
17:45	Session Close Welcome Cocktail Reception with the Industry				



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Friday 5 September 2008

8:30 – 9:52	SESSION 4 - TRANSLATIONAL RESEARCH Session Moderator: Brian Stein			
8:30	Biomarkers for tailored treatment and decision making in Head & Neck cancer			
8:56	- Gregory Wolf Targeting hypoxia in HNSCC: Results of the HeadSTART trial - Danny Rischin			
9:12	Molecular Imaging: Beyond FDG			
9:28	Tissue banking: The how, the why and the where.			
9:44	Over-expression of Snail transcription factors by head and neck squamous cell carcinoma cells inhibits terminal differentiation and promotes inflammation - Guy Lyons			
9:53 - 10:23	Morning Tea with the Industry			
10:24 – 11:14	SESSION 5 - TRANSLATIONAL RESEARCH Session Moderator: Ben Solomon			
10:24	The role and inhibition of growth factor receptor signalling in Head & Neck cancer			
10:50	HPV in Head & Neck cancer - Barbara Rose			
11:06	Cetuximab in Head & Neck cancer: The good newsand the not so good news - Sandro Porceddu			
11:15 – 12:09	SESSION 6 - THYROID CANCER Sponsored by Genzyme Genzyme Session Moderator: Rodney Judson			
11:15	The role of recombinant rTSH in the management of differentiated Thyroid cancer - Margaret Zacharin			
11:28	The evolving role of nuclear medicine in the management of Thyroid cancer - Rod Hicks			
11:41	Management of non-iodine avid Thyroid cancer - Julie Miller			
11:54	Panel Discussion and Questions from the floor regarding Thyroid cancer			
12:10 - 13:10	Lunch with the Indistry			



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FRIDAY 5 SEPTEMBER 2008 (CONT)

13:10 – 14:43	SESSION 7 - FUNCTIONAL OUTCOMES Session Moderator: Randall Morton				
13:10	Management of swallowing disorders in the Head & Neck cancer patient treated with chemo-radiotherapy - Cathy Lazarus				
13:37	Eating in Melbourne following radiotherapy: Factors that influence outcomes				
13:50	Swallowing, nutrition and quality of life outcomes following altered fractionation radiotherapy and chemo-radiotherapy - Bena Riddle				
13:59	Post-laryngectomy - it's hard to swallow: An Australian study of prevalence and self-reports of swallowing function after undergoing a total laryngectomy - Julia Maclean				
14:08	Treatment, quality of life and survival in a cohort of 169 tonsil cancers Royal Adelaide Hospital Data - Guy Rees				
14:17	Evaluation of clinical outcome and quality of life following facial reanimation - Sydney Ch'ng				
14:26	Scapular free flaps in Head and Neck reconstruction - Julian White				
14:35	Active vs passive drainage of the neck following neck dissection – a non randomised prospective study - Martin Batstone				
14:44 - 15:14	Afternoon Tea with the Industry				
15:15 – 16:45	SESSION 8 - MID FACE TUMOURS Sponsored by Synthes () SYNTHES Session Moderator: Ben Panizza				
15:15	Diagnostic imaging difficulties defused - Robin Cassumbhoy				
15:31	Indications for comprehensive and selective neck dissection with parotidectomy for metastatic cutaneous melanoma and SCC based on analysis patterns of lymphatic spread and post-operative morbidity				
15:40	Endoscopic tumour resection – is it working in Melbourne? - Stephen Tudae				
15:49	Review of modern mid face surgical techniques/challenges - Brent Uren				
15:58	Reconstruction options - Peter Wilson				
16:07	Reconstruction options - Swee Tan				
16:16	Reconstruction outcomes - Arun Chandu				
16:25	Case studies, panel discussion and questions from the floor regarding mid face tumours - Brent Uren, Peter Wilson, Arun Chandu, Swee Tan, Bob Smee				
16:45	Annual General Meeting				
18:00	Session Close				
19:00	Pre-Dinner Drinks, Ballroom Foyer				
19:30	Conterence Dinner, Ballroom 3				



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SATURDAY 6 SEPTEMBER 2008

9:00 - 10:04	SESSION 9 - PATIENT CARE Session Moderator: David Hamilton
9:00	Nutritional rehabilitation following chemo-radiotherapy for Head & Neck cancer: What is the evidence?
9:09	Validation of the Royal Brisbane and Women's Hospital swallowing and nutrition guidelines for patients with Head & Neck cancer
9:18	Quality of life following conservation surgery for early laryngeal cancer
9:27	Patient responses to their Multidisciplinary Head and Neck Clinic visit - Justine Streit
9:36	Snapshots of the role of H&N Clinical Nurses/Coordinators - Sarah McDonald
9:49	Managing end of life issues specific to Head & Neck cancer patients - Eleanor Flynn
10:05 - 10:35	Morning Tea with the Industry
10:36 – 12:11	SESSION 10 - ORAL TONGUE Sponsored by Elekta Session Moderator: Gary Morgan ELEKTA
10:36	Buccal mucosal carcinoma - Robert Smee
10:45	Treatment outcomes in patients with T1-2 N0 SCC of the oral tongue (OTSCC): A Retrospective Study - Sinead Brennan
10:54	Tongue function and swallowing in the normal and treated oral cancer patient - Cathy Lazarus
11:20	The shrinking evidence for managing oral tongue cancers - David Wiesenfeld
11:29	Obtaining adequate surgical margins for oral tongue cancer - Carsten Palme
11:38	Reconstruction for oral tongue cancer - Del Hinkley
11:47	Adjuvant treatment for oral tongue cancer - Chris Milross
11:56	Panel discussion and questions from the floor regarding oral tongue cancer - Chris Milross, Cathy Lazarus, Bill Coman, Del Hinkley
12:12 – 13:12	Lunch with the Industry
13:13 – 15:07	SESSION 11 - OUTCOMES / REGIONAL SNAPSHOTS Sponsored by Orphan Australia Session Moderator: June Corry
13:13	Health behaviors, survivorship and outcomes in Head & Neck cancer: Opportunities for new approaches to prevention - Gregory Wolf
13:39	Lessons from our patients: H&N cancer model - Paul Harari Sponsored by Merck Sorono
14:05	Snapshot of Head & Neck cancer in Singapore
14:26	Snapshot of Head & Neck cancer in Indonesia - Soehartati Gondhowiardjo
14:47	Snapshot of Head & Neck cancer in China - Daniel TT Chua
15:08 - 15:38	Afternoon Tea with the Industry



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SATURDAY 6 SEPTEMBER 2008 (CONTD)

15:39 – 17:00	SESSION 12 - FUTURE DIRECTIONS Session Moderator: Swee Tan	Sponsored by Mereck Serono			
15:39	Future of radiotherapy delivery - IMRT, IGRT and ART: Better outcomes, less toxicity, more work? - Michael Ng				
15:52	Fiber-based thulium laser surgery in the larynx: A new approach - Matthew Broadhurst				
16:01	Robotic surgery for treatment of head and neck malignancy in Australia - Suren Krishnan				
16:10 – 16:53	Head and Neck in 2020 - Looking toward the future				
16:10	A Surgeon's perspective - Jonathan Clark				
16:21	A Medical Oncologist's perspective - Ben Solomon				
16:32	A Radiation Oncologist's perspective - June Corry				
16:43	Discussion and questions from the floor				
16:54	Presentation of Prizes - June Corry				
17:00	Meeting Close				







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ABSTRACTS





VOICE REHABILITATION FOLLOWING LARYNGECTOMY

A. Perry

School of Human Communication Sciences La Trobe University, Bundoora

The modern era of surgical speech restoration (SSR) after a total laryngectomy began in the late 1970s with the advent of the Blom-Singer procedure; a surgical-prosthetic mode of restoring 'voice' to people who undergo a total laryngectomy. The advantages of this technique will be explained.

Unfortunately, SSR is not without problems. Advances in voice prostheses will be presented, many of which developments are designed to address the problem of candida albicans ('thrush').

The physiological pre-requisites for successful voice to ensue will be outlined. Research data, documenting the importance of the tonicity of the pharyngo-esophageal (P-E) segment, will be presented, and success rates from key H&N cancer centres will be discussed.





SURGICAL SPEECH RESTORATION (SSR) [IT WORKS IF YOU KNOW WHAT YOU ARE TRYING TO DO!]

T. Cheesman

Barts and the London NHS Trust, London, UK

A recent survey of the literature when preparing for a 25 year review of Surgical Speech Restoration (SSR) showed a surprisingly high degree of failure and of complications in current series of SSR. Discussions with both trainees and consultants revealed a disappointing appreciation of what surgeons were trying to achieve.

A general consensus felt that, "all that is necessary is to make a fistula in the tracheo-oesophageal party wall, insert one of the latest valves, and the patient will talk.." There was a complete lack of knowledge of the early studies into SSR - primarily because these papers are no longer referenced, as being 'outdated.' The consequent revision course, addressing the Surgical Principles Underlying SSR and the management of common clinical problems, has been well received and this information will be presented in Melbourne.

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SURGERY FOR LOCALLY ADVANCED LARYNX CANCER

J. Corry*, S. Kleid^, N. Vallance#, B. Lyons+, A. Sizeland^, I. D'Costa*, D. Rischin% and L. Peters*.

*Department Radiation Oncology, Peter MacCallum Cancer Centre, East Melbourne, Victoria ^Department of Surgery, Western Hospital, Footscray, Victoria

#Department of Surgery, Monash Medical Centre, Clayton, Victoria

*Department of Surgery, St Vincent's Hospital, East Melbourne, Victoria

[%]Department Haematology and Medical Oncology, Peter MacCallum Cancer Centre, East Melbourne, Victoria

Purpose:

The aim of this study was to review the results of surgery for patients with locally advanced squamous cell carcinoma larynx (LASCCL).

Methodology:

All patients with TNM Stage 3 or 4 LASCCL who presented to the Peter MacCallum Cancer Centre (PMCC) between January 2002 and December 2006 and treated surgically with curative intent were reviewed.

Results:

There were 3 females and 32 males. The median age was 67years (range 48 -77years). Ninety-four percent had Stage 4 disease. Sites: Supraglottic 12, Glottic 23. Surgery: 18 total laryngectomies (TL), 9 TL and unilateral neck dissections (ND), 7 TL and bilateral ND, 1 Laser and ND. Surgery was performed at 6 separate institutions. The median time from surgery to commencing post-operative radiotherapy (PORT) +/- chemotherapy was 6.4 weeks (range 3.4 – 12.4 weeks). At the time of commencement of PORT, only 35% TL patients were able to achieve voice with their Blom-Singer valve.

The local control rates at 3 and 5 years were 97% and 97%, the regional control rates at 3 and 5 years were 94% and 77%, respectively. The distant disease-free survival at 3 and 5 years were 94% and 77%, respectively. The disease free survival at 3 and 5 years were 88% and 72%, respectively. The overall survival at 3 and 5 years was 76% and 49%, respectively.

Conclusions:

Long term locoregional control rates are excellent in patients deemed unsuitable for larynx preservation and treated by surgery and (chemo)PORT. Improvement in voice rehabilitation is required.



OVER-EXPRESSION OF SNAIL TRANSCRIPTION FACTORS BY HEAD AND NECK SQUAMOUS CELL CARCINOMA CELLS INHIBITS TERMINAL DIFFERENTIATION AND PROMOTES INFLAMMATION

J.G. Lyons^{1,2}, N. Roue^{1,2}, V. Patel³, J.S. Gutkind³ and G.M. Halliday²

- ¹ Sydney Head & Neck Cancer Institute, Sydney Cancer Centre, RPA Hospital, Camperdown
- ² Discipline of Dermatology, Faculty of Medicine, University of Sydney
- ³ Oral and Pharyngeal Cancer Branch, NIDCR, NIH, Bethesda MD, USA

Purpose:

The Snail family of transcription factors is over-expressed in carcinomas and Snail2 is more highly expressed in head and neck squamous cell carcinomas (HNSCCs) than in normal oral epithelium and in recurrent than in non-recurrent HNSCCs. The aim of this study was to identify the cellular and molecular mechanisms by which Snails might contribute to the pathogenesis of HNSCCs.

Methodology:

Plasmid and viral vectors were used to express Snail1 and Snail2 in human HNSCC cells. Genes whose expression was modified by Snails were identified by microarray analysis and quantitative real-time PCR. The biological effects of Snails on differentiation and migration were assessed using quantitative in vitro assays.

Results:

Expression of Snail1 or Snail2 in HNSCC cells inhibited their terminal differentiation, the stage of desquamation being particularly affected. The genes for ELF3 and matriptase-1, which are important for driving transcription of terminal differentiation-associated genes and barrier formation, are repressed by Snails. Re-expression of matriptase-1 in Snail-expressing cells partially rescued differentiation. Additionally, expression of the genes for the cytokines IL6, IL8 and CXCL1, and the prostaglandin synthetic enzyme COX2 were strongly up-regulated by Snails, coinciding with an enhanced ability to attract monocytes and to invade extracellular matrix. Expression of this group of pro-inflammatory genes has previously been shown to correlate with poor prognosis in HNSCC patients.

Conclusions:

Snail may contribute to HNSCC progression at early stages, by down-regulating factors required for the terminal differentiation of keratinocytes, and at later stages, by creating a pro-inflammatory environment in the tumour.

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CETUXIMAB IN HEAD AND NECK CANCER: THE GOOD NEWS...AND THE NOT SO GOOD NEWS

S.V. Porceddu^{1,2}, D.I. Pryor¹, A. Guminski^{1,2}, B.H. Burmeister^{1,2}, K. Shepherdson¹,

D. Thomson^{1,2} and M.P. Poulsen^{2,4}

¹ Southern Area Cancer Services, Princess Alexandra Hospital, Brisbane

² University of Queensland

⁴ Southern Area Cancer Services, Mater Hospital, Brisbane

Purpose:

Great interest has been generated since the publication of the randomised trial demonstrating superiority of concurrent cetuximab and radiotherapy (RT) compared with RT alone in locally advanced head and neck squamous cell carcinoma (LAHNSCC). We report on the first 13 consecutive patients with LAHNSCC ineligible for cisplatin treated with cetuximab/RT at our institution.

Methodology:

Data was collected prospectively between August 2007 and May 2008. Planned treatment consisted of a cetuximab loading dose (400 mg/m²) via intravenous infusion 1 week prior and then weekly (250 mg/m²) with 70Gy in 35 daily fractions over 7 weeks. Toxicity was recorded using the CTCAE V3.0.

Results:

Median age was 68 years (range 52-82 years), 10 were male and the predominant primary sites were hypopharyngeal 5 and oropharyngeal 5. Ineligibility for cisplatin consisted of renal impairment 5, hearing impairment 4 and co-morbidities 4. Twelve of the 13 patients received the planned dose of RT. Of the 13 patients, 10 (77%) developed Grade III/IV skin reactions and 10 (77%) Grade III/ IV mucositis. Six (46%) patients required admission for management of severe skin reactions and/ or mucositis with 4 (31%) requiring a treatment break, median 10 days (9-15days). Only 4 (31%) patients managed to complete the planned 8 cycles of cetuximab. Of the 9 patients with 12 week post-therapy re-staging, 7 (78%) achieved a complete response.

Conclusion:

Our early experience with cetuximab/RT has demonstrated a higher rate of toxicity compared with the recently reported trial, resulting in lower treatment compliance and delays in completing RT.



CURRENT STATUS OF RECOMBINANT TSH (RTSH) IN MANAGEMENT OF THYROID CANCER

M. Zacharin

Dept of Endocrinology, Royal Children's Hospital, Parkville, Victoria

Past management strategies for thyroid remnant ablation after surgery for thyroid cancer and for long term surveillance have utilized elevation of TSH by withdrawal of thyroid hormone supplements for 4 weeks prior to diagnostic scanning and therapeutic ablation. Problems include adverse physical health and quality of life effects of hypothyroidism, failure to raise TSH adequately if the subject has hypopituitarism and contribution to impairment of growth in children if this method is repeatedly utilized.

Thyroid cancer is now diagnosed much more frequently, particularly in children and adolescents after exposure to ionizing radiation, partly due to increased survival and also to improved surveillance. rTSH has been shown in adults to be equally effective as induced hypothyroidism in terms of TSH levels achieved, uptake of tracer iodine administered and lower whole body radiation exposure. Similar rates of tumour recurrence detection and residual thyroid bed uptake are seen using rTSH compared with thyroid hormone withdrawal.

Use of rTSH minimizes patient discomfort, improves reliability and simplicity of preparation for scanning, obviates problems of failed uptake due to unrecognized secondary hypothyroidism (TSH deficiency) and minimizes growth inhibition where repeated dosing is required, with a good safety profile.



EATING IN MELBOURNE AFTER RADIOTHERAPY: FACTORS THAT INFLUENCE OUTCOMES

J. Frowen¹, S. Cotton², J. Corry³ and A. Perry¹.

- ¹ School of Human Communication Sciences, La Trobe University, Bundoora, Victoria
- ² ORYGEN Research Centre, Department of Psychiatry, University of Melbourne, Parkville, Victoria
- ³ Division of Radiation Oncology, Head and Neck Cancer Unit, Peter MacCallum Cancer Centre, East Melbourne, Victoria

Purpose:

To prospectively evaluate swallowing function in a cohort of patients with head and neck cancer, and examine whether various demographics, tumour characteristics and treatment-related factors influence swallowing outcomes after radiotherapy.

Methodology:

Eighty-one patients with head and neck cancer of the oropharynx (n=47), larynx (n=26) and hypopharynx (n=8) were examined using videofluoroscopy swallowing studies prior to treatment and again at three and six month following treatment. Observational measures were completed on each patient's videofluoroscopic images, and a rating of swallowing impairment and activity limitation was made at each time point.

Results:

Swallowing function was found to be optimal at baseline, significantly worse three months posttreatment, and improved by six months post-treatment – but not back to baseline levels. Patients with hypopharyngeal tumours, and those with large (particularly T4) tumours were more likely to demonstrate swallowing problems both before and after treatment. Patients who lived in rural areas had worse swallowing outcomes than those living in metropolitan Melbourne, and patients who were ex-heavy drinkers had worse swallowing outcomes than those who were non-drinkers. Patients who received parallel opposed radiotherapy and/or bilateral radiation to the pharynx had worse swallowing outcomes post-treatment. Multivariate analysis identified that swallowing function at baseline or early in the post-treatment period is the strongest predictor of subsequent swallowing function. Other treatment-related factors (particularly the radiotherapy technique used) may also predict swallowing outcomes, but to a lesser degree.

Conclusions:

A number of demographics, tumour, and treatment-related variables that influence swallowing outcomes after radiotherapy for head and neck cancer were identified in this study. These variables should be considered when discussing potential side-effects of treatment with patients, and when designing future research studies.



SWALLOWING, NUTRITION AND QUALITY OF LIFE OUTCOMES FOLLOWING ALTERED FRACTIONATION RADIOTHERAPY AND CHEMORADIOTHERAPY

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Purpose:

Treatment intensification is commonly used for "high risk" head and neck cancer patients, including altered fractionation radiotherapy (AF). The literature suggests that the severity of acute toxicity resultant from AF with concomitant boost may be heightened, and of longer duration than conventional treatment, and may result in swallowing and nutritional compromise.

Patients and Methods:

This study prospectively examined swallowing function during and following AF for T1, T2, and T3 head and neck squamous cell carcinoma (SCC). Physiological swallowing function, nutrition, quality of life (QoL) and acute toxicity measures were recorded pre-treatment and 6 months post-treatment. A group who received chemoradiotherapy for the same tumour size and type are evaluated for comparison of late effects at 6 months post-treatment.

Results:

Longitudinal outcomes for the AF group and comparative data of swallowing and nutritional outcomes across the AF and chemoradiotherapy patients will be discussed. Preliminary analysis highlights similar long-term swallowing outcomes across both groups. Nutrition scores mimic swallowing physiology. Participants reported QoL following chemoradiotherapy was found to be lower than for AF.

Conclusions:

Patients receiving curative non-surgical treatment for HNC need long-term follow-up for management of swallowing and nutritional sequelae. Recovery from acute side effects does not predict long-term swallowing recovery and objective swallowing assessment needs to be completed several months following treatment.



POST-LARYNGECTOMY - IT'S HARD TO SWALLOW: AN AUSTRALIAN STUDY OF PREVALENCE AND SELF-REPORTS OF SWALLOWING FUNCTION AFTER UNDERGOING A TOTAL LARYNGECTOMY

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The prevalence of swallowing disorders (dysphagia) following a total laryngectomy remains unknown, with estimates varying from 17-70%.

Purpose:

The primary aim of this study was to investigate the prevalence and nature of self-reported dysphagia following a total laryngectomy across New South Wales (NSW), Australia. A secondary aim was to document the effect of dysphagia on the respondents' social activities and participation.

Methodology:

A questionnaire battery was sent to all laryngectomy members (n = 197) of the Laryngectomee Association of NSW.

Results:

One hundred and twenty questionnaires (61%) were completed and returned. Dysphagia was self-reported by 71.8% of the cohort. The most commonly reported features of dysphagia included: an increased time required to swallow; needing fluids to wash down a bolus and avoidance of certain food consistencies. Severe distress was associated with dysphagia in 39.7% of the laryngectomees surveyed and prevented 57% of the cohort from eating out socially at restaurants or at friends' houses.

Conclusion:

The prevalence of self reported dysphagia following total laryngectomy in this Australian study is 72%. Dysphagia can result in laryngectomees making significant changes to their diets and it has a marked impact on their activities and social participation.



TREATMENT, QUALITY OF LIFE AND SURVIVAL IN A COHORT OF 169 TONSIL CANCERS. ROYAL ADELAIDE HOSPITAL DATA

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Purpose:

Head and Neck Oncologists sit on the edge of a major change in management of oropharyngeal cancer. Current understanding of aetiology - in particular the importance of HPV, and future treatments including anti viral therapy and pro-apoptotic biologic agents, are rapidly evolving. To set our house in order, we wished to bring up date all of our demographic, treatment, quality of life and survival data on patients with tonsil cancer.

Methodology:

We reviewed our database of 169 patients with tonsil cancer treated by the ORL-HNS Unit at RAH between 1998 and 2007. We present demographic details, tumour staging, treatment patterns, quality of life and survival data.

Results:

21% of our patients were female, a proportion increasing over the last 30 years in South Australia. The Standardised Incidence Ratio is significantly higher in country vs metropolitan patients. Treatment in South Australia is predominantly Radiotherapy for early stage disease and Surgery, Radiotherapy +/- chemotherapy in advanced stage disease. This is the predominant treatment modality in SA. Development of transoral resection techniques, particularly with laser surgery and now robotic surgery is the mainstay of therapy.

Five Year Disease Specific Survival with this rationale is 85% for Stage I+II and 66% for Stage III and IV.

Quality of Life shows best outcomes for overall scores, swallowing and speech with surgical resection (transoral) vs radiotherapy. Poorer outcomes are seen with increasing stage (primary and neck). Scores are stable between 2-5 years after therapy.

Conclusions:

We look to a future with increased biologic therapy for oropharyngeal cancer, associated with improved quality of life and survival. Our data forms a basis for assessment of these future therapies.



EVALUATION OF CLINICAL OUTCOME AND QUALITY OF LIFE FOLLOWING FACIAL REANIMATION

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Background:

Facial paralysis is devastating particularly in patients undergoing cancer treatment, therefore, facial reanimation is essential for maximisation of quality of life (QOL). We evaluate the clinical outcome and QOL in patients treated at our Unit 2000-2006.

Methods:

Patients were culled from the Head and Neck database. They were assessed for spontaneity, resting and forced voluntary symmetry, and synkinesis with a modified Sunnybrook grading system based on photos and video recording. Patients also completed the previously validated Facial Clinimetric Evaluation questionnaire based on 6 domains: facial movement, facial comfort, oral function, eye comfort, lacrimal comfort and social function.

Results:

72 patients (aged 11-88 years) underwent ablative cancer surgery (n=54). Other pathology were acoustic neuroma (n=6), recurrent pleomorphic adenoma (n=3), congenital facial palsy (n=4), trauma (n=3) and unresolved Bell palsy (n=2). 10 patients were referred from other services for delayed reanimation following skull base surgery. 22 patients required reanimation of the entire hemiface, and the remainder lesser degrees of reanimation.

31 patients participated. Mean follow-up period is 24 months (range, 4-84). The upper third proves to be surgically most challenging (1.4 operations/ patient). Forced voluntary movements were average whereas spontaneous movements were good on clinical assessment. Patients rated their clinical outcomes highly.

Conclusion:

Facial reanimation requires a thorough understanding of the principles and techniques for optimal outcome. There is no significant correlation between the clinician's assessment of impairment and the patient's social function. Immediate facial reanimation should be part of the overall treatment to preserve or improve QOL in head and neck cancer patients.



SCAPULAR FREE FLAPS IN HEAD AND NECK RECONSTRUCTION

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London Health Sciences Centre, London, Ontario, Canada and Waikato Hospital, Hamilton, New Zealand

Purpose:

To describe the experience of a single institution with the use of scapular free flaps for reconstruction of head and neck surgical defects.

Methodology:

Retrospective chart review of patients undergoing scapular free flaps in London, Canada over a 10 year period from 1997 to 2007.

Results:

63 scapular free flaps were performed. 30 fasciocutaneous flaps were used predominantly to reconstruct extensive soft tissue defects in the parotid region or after large tongue resections. Skin paddles of up to 15 x 10 cm were harvested with direct closure of the donor site. 33 osteocutaneous flaps containing up to 12 cm of bone were used to reconstruct oromandibular defects. Osteotomies were performed in 11 patients. Reoperation was required in 7 cases (11%). Total flap loss occurred in 3 cases (5%) and partial loss in 2 patients. Donor site complications occurred in 12 patients, and 2 patients reported concern about loss of shoulder range of motion. Complications distant from the surgical sites occurred in 8 patients undergoing reconstruction with an osteocutaneous flap, including one mortality as a result of myocardial infarction.

Conclusions:

Scapular flaps provide a versatile set of free tissue transfer options which allow successful reconstruction of a range of head and neck surgical defects. Osteocutaneous scapular flaps are particularly useful for mandibular reconstruction in patients with peripheral vascular compromise or extensive associated soft tissue deficits.



ACTIVE VS PASSIVE DRAINAGE OF THE NECK FOLLOWING NECK DISSECTION – A NON RANDOMISED PROSPECTIVE STUDY.

M.D. Batstone, D. Lowe, R.J. Shaw, J.S. Brown, E.D Vaughan and S.N. Rogers University Hospital Aintree – Liverpool, UK

Introduction:

Drainage is used following neck dissection to prevent the collection of fluid and aid healing. There is controversy regarding the type of drain (active or passive) which should be used due to concerns about the potential for compromise of free flap pedicles with active drains.

Methods:

A prospective non randomised study was undertaken to determine if there were any differences in neck healing following neck dissection between active and passive drains. A consecutive series of patients (the majority of whom had free flap reconstruction) were included over an eight month period and were examined for delayed healing of the neck wound, flap loss, infection, haematoma and fistula.

Results:

Sixty patients underwent 72 neck dissections during the study period (Passive - 13, Active - 47). The delayed healing rate in patients with passive drains was 54% compared with 6% for active drains (P<0.001). This difference remained significant irrespective of surgeon grade, nodal status and whether or not a free flap was performed. There was no patient in whom the drain was thought to contribute to free flap loss

Discussion:

This non randomised study has shown a significant difference in neck healing depending on the type of drain used following neck dissection. Despite the numerical differences between the groups the patients were relatively well matched for the parameters described. This difference in neck healing, combined with the lack of evidence for a contribution to flap loss, suggests active drains should be used following neck dissection in both free flap and non free flap cases.



DIAGNOSTIC IMAGING DIFFICULTIES DEFUSED

R. Cassumbhoy

London Health Sciences Centre, London, Ontario, Canada and Waikato Hospital, Hamilton, New Zealand

MRI plays a key role in T staging of head and neck malignancy. The combination of sequences used in the imaging protocol is crucial for adequate display of anatomical structures and associated pathology within the skull base and midface.

This short presentation will outline the sequences that are most useful and which form a bare minimum for adequate MRI imaging of these regions. Pathology that is best shown on MRI will also be demonstrated using some illustrative case examples.



INDICATIONS FOR COMPREHENSIVE AND SELECTIVE NECK DISSECTION WITH PAROTIDECTOMY FOR METASTATIC CUTANEOUS MELANOMA AND SCC BASED ON ANALYSIS PATTERNS OF LYMPHATIC SPREAD AND POST-OPERATIVE MORBIDITY

M. Moncrieff, J.R. Clark, V-I Forest, K. Shannon, A. Clifford, K. Gao and C. O'Brien The Sydney Head & Neck Cancer Institute Sydney Cancer Center Royal Prince Alfred Hospital & University of Sydney, New South Wales

Purpose:

Whilst surgery is the mainstay of treatment for both metastatic cutaneous SCC and melanoma, adjuvant radiotherapy (RT) is a proven effective therapy for SCC only. The aim of this study was to compare the extent of treatment of the nodal fields based upon patterns of spread and morbidity.

Methodology:

A cohort of 356 patients (253 with SCC & 103 with melanoma) treated between 1987 and 2007 was retrospectively analysed.

Results:

All patients underwent a neck dissection and this was combined with a parotidectomy in 250 (70%) cases. In both melanoma and SCC groups the rate of parotid involvement (P+) was highest (62% & 88%, respectively) followed by level II (38% & 36%, respectively). In the P+ subgroup, level IV/V involvement was strongly associated with level II/III involvement for SCC and where the primary was located on the face, scalp and external ear.

Conclusions:

Treatment of the parotid is indicated for most patients with cutaneous metastases to the cervical lymph nodes. In patients with SCC: P+N0, a selective neck dissection incorporating level II/III enables more focused RT and avoids operative morbidity. There were no low risk subgroups for P+N0 melanoma patients and a comprehensive or postero-lateral neck dissection is recommended.



ENDOSCOPIC TUMOUR RESECTION - IS IT WORKING IN MELBOURNE?

S. Tudge

The Alfred Hospital, Commercial Road, Melbourne, Victoria

Endoscopic resection has been suggested as a treatment option for tumours of upper aerodigestive tract tumours with the aim of minimizing disturbance of normal tissues while obtaining satisfactory excision. The carbon dioxide laser is frequently used as the primary cutting tool.

This report presents the outcomes of 29 consecutive patients treated over 4 years where endoscopic resection was the initial treatment planned. The tumour type and stage, the treatment delivered and patient outcomes were determined from the clinical files.

In the primary treatment setting, 23 patients had endoscopic resection attempted. Twenty tumours were resected and 4 of these required post-operative radiotherapy for local or regional indications. In 3 patients, resection could not be achieved because of technical problems. Local recurrence occurred in only 1 patient, with a mean of 18 months follow up. Six patients had endoscopic resection in the surgical salvage setting, following previous radiotherapy. Only 1 recurred locally after a mean of 15 months.

There was no surgical mortality and perioperative morbidity was remarkably low. All patients with glottic tumours have altered voices following treatment, with 1 of 8 having a non-functional voice. Eight of 18 patients with treatment of the pharynx or supraglottis have a normal swallow, 6 have a restricted oral diet and 4 are peg dependent, mostly following salvage surgery.

In well selected patients, endoscopic tumour resection is a safe and effective treatment option and should be considered in treatment planning of head and neck cancer.



RECONSTRUCTION OPTIONS IN THE MIDFACE

P. Wilson

Royal Melbourne Hospital

Rehabilitation of unilateral maxillary resection has relied upon a large removable prostheses, usually with reasonable quality of life and excellent access for review. Filling the defect with live tissue can present difficult or insuperable problems for replacement of dental tissues. It is suggested that surgical reconstruction be considered first for small defects with few dental complications, or very large defects.



MID FACE TUMOURS - RECONSTRUCTIVE OPTIONS

S. T. Tan

Head & Neck and Skull Base Surgery/Oncology Programme, Wellington Regional Plastic, Maxillofacial & Burns Unit, Hutt Hospital, New Zealand

Tumours involving the midface pose a challenging problem. Treatment often necessitates surgery and radiotherapy to achieve optimal loco-regional control. Surgical ablation usually results in complex three-dimension defects, often involving related anatomical structures. The aim of reconstruction is to achieve restoration of form and function. The relative rarity and heterogeneous nature of this clinical problem makes standardisation of treatment difficult.

In this paper, the author presents the techniques available and the strategy for midface reconstruction guided by plastic surgical principles and personal philosophy. A number of cases are presented to illustrate the decision making process and technical nuances to achieve optimal preservation of the quality of life.



NUTRITIONAL REHABILITATION FOLLOWING CHEMO/RT FOR HEAD AND NECK (H&N) CANCER: WHAT IS THE EVIDENCE?

J. Loeliger

Peter MacCallum Cancer Centre

Background:

It is well established that radical chemo-radiation for H&N cancer is an intensive treatment modality that can lead to significant toxicities and a long recovery. Malnutrition, severe weight loss and prolonged enteral feeding are common.

Purpose:

To examine the evidence base for factors that influence the nutritional rehabilitation of H&N cancer patients following chemo/RT.

Methodology:

A literature search, critical appraisal and an audit on current nutrition practices was conducted at PMCC. This data and professional consensus was used to develop an algorithm.

Results:

High-quality literature exists that supports regular and intensive dietetic intervention in the immediately post-treatment phase^{1,2}. Side-effects such as mucositis have a significant impact on the nutritional rehabilitation of patients³. Gaps exist in the evidence in the prediction of tube type/ length of time a feeding tube should stay insitu, in the process of transitioning tube-fed patients to oral intake and the effect of nutrition intervention on longer-term morbidity/mortality. Local audit data revealed 48% patients required a feeding tube during/after treatment, the most common time for NGT insertion and removal was week 4 of treatment and 4 weeks post-treatment respectively. Weight loss was evident in 86% of patients. Transitional feeding was most commonly found to commence from 1 week post-treatment. Large costs are associated with the treatment of tube-fed H&N patients.

Conclusion:

The quality of the literature available on nutritional management for H&N patients following chemo/RT is mixed. The development of an algorithm will assist adherence to evidence-based practice and potentially benefit patients via consistent nutritional management. Adherence to the algorithm and potential changes to practice will be audited. Long-term prospective RCT's are needed to investigate nutrition/functional deficits for >12 months post-treatment.

- 1 Isenring E, Capra S, Bauer J (2004). Nutrition intervention is beneficial in oncology outpatients receiving radiotherapy to the gastrointestinal or head and neck area. Br J Cancer 91:447-452.
- 2 Ravasco P, Moneiro-Grillo I, Marques V, Ermelinda Camilo M (2005). Impact of nutrition on outcome: A prospective randomized controlled trial in patients with head and neck cancer undergoing radiotherapy. Head and Neck 27:659-668.
- 3 Trotti A, Bellm L, Epstein J, Frame D, Fuchs H, Gwede C, Komaroff E, Nalysnyk L, Zilberberg M (200). Mucositis incidence, severity and associated outcomes in patients with head and neck cancer receiving radiotherapy with or without chemotherapy: a systematic literature review. Radiotherapy and Oncology 66:253-262.



VALIDATION OF THE ROYAL BRISBANE AND WOMEN'S HOSPITAL SWALLOWING AND NUTRITION GUIDELINES FOR PATIENTS WITH HEAD AND NECK CANCER

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Purpose:

The Royal Brisbane and Women's Hospital Swallowing and Nutrition Guidelines for Patients with Head and Neck Cancer were developed and endorsed by members of the multidisciplinary Combined Head and Neck Clinic (CHNC) in 2006 and implemented in 2007. The Guidelines are used to provide a risk rating based on diagnosis, treatment, nutritional status and dysphagia. High risk patients are referred for a prophylactic gastrostomy (PEG). Our aim was to validate the Guidelines in a cohort of patients from the CHNC who were treated for their head and neck cancer with curative intent.

Methodology:

Data were collected for patients who presented between January and December 2007 using a database. Information collected included: clinical details, baseline nutrition and swallowing assessment, and outcomes post-treatment. A multivariate general linear model was fitted to the data. Factors examined in the model include PEG insertion, BMI, age, sex, tumour site, tumour size, and treatment. The dependant variable in the logistic regression was defined as a binary variable representing percentage weight loss during treatment with ≥10% weight loss considered an event.

Results:

Results from the study (n=235) indicate that synchronous chemoradiotherapy (p=0.003) and weight loss \geq 10% at presentation (p=0.01), are statistically significant for placing patients at high risk of nutritional compromise.

Conclusions:

Treatment type and baseline weight loss are considered predictors for intensive swallowing and nutrition intervention including prophylactic PEG placement. These findings validate these components of the current high risk rating criteria in the Guidelines. Further validation of other components is required before finalisation and publication of the Guidelines.



QUALITY OF LIFE FOLLOWING CONSERVATION SURGERY FOR EARLY LARYNGEAL CANCER

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Purpose:

To enable improved counselling to laryngeal cancer patients in relation to larynx-conserving treatment options by enhancing understanding of the impact that treatment choices have on a patient's quality of life (QOL) and functioning.

Methodology:

A retrospective, cross-sectional cohort study of adult larynx cancer patients at the Royal Adelaide Hospital was conducted. Subjects were surveyed using four (4) validated quality of life questionnaires, being the V-RQOL, MDADI, UNIWAS, and FACT H&N. Other data including patient age, tumour type, stage and treatment details were collected from medical records and the Department¹s database. QOL scores were analysed according to these characteristics.

Results:

67 of 121 subjects identified answered the surveys (61 males and 6 females). Patient age ranged from 42 to 84 years. Time since treatment ranged from less than 1 year to 11 years. Overall, laser glottic patients had better QOL than patients with cricohyoidopexy, particularly in relation to vocal and swallowing function. Patients who underwent radiotherapy were more likely to experience problems with swallowing and lack of saliva.

Patients requiring neck dissection complained of pain more often.

Conclusions:

Amongst laryngeal cancer patients undergoing larynx-conserving treatment, cricohyoidopexy, radiotherapy and neck dissection were risk factors for poorer QOL scores.



PATIENT RESPONSES TO THEIR MULTIDISCIPLINARY HEAD AND NECK CLINIC VISIT

J. Streit, J. Oates, C. David, L. Sneddon, R. Martin, J. Clark and C. O'Brien

Sydney Head and Neck Cancer Institute, Sydney Cancer Centre, Royal Prince Alfred Hospital and The University of Sydney, Sydney, Australia

Purpose:

To prospectively assess the subjective experience of patients and the degree of benefit they felt they gained from attending the Multidisciplinary Head and Neck Clinic (MDHNC).

Methodology:

An internally validated questionnaire asking patients to provide responses to their experiences at the MDHNC was distributed between May 2006 and May 2008. The questionnaire consisted of 36 questions, addressing 3 components of the clinic; before, during and after attendance. One hundred questionnaires were completed.

Results:

Seventeen patients did not know their diagnosis prior to attending the clinic. Waiting times were mostly longer than expected with 43 patients waiting for more than 30 minutes to be seen. All but 11 patients tolerated the examination well, although 21 patients were unprepared for the number of people present at the clinic with 17 of those patients feeling overwhelmed. Eighty-five patients valued the post-clinic discussion with their specialist, although 14 patients felt they received contradictory information during the discussion. Ten patients felt that insufficient information about treatment choice was provided to their family. Sixty-eight patients did not receive a written treatment plan at the end of the clinic.

Conclusion:

Patients were comfortable being examined in the presence of a large number of clinicians and valued the discussion with the treating specialist. The key target areas for future improvement are ensuring all patients know their diagnosis prior to attending the clinic, reducing waiting times, providing clearly written plans for treatment, and distributing more information to assist individuals accompanying patients.


A SNAPSHOT OF THE ROLES OF HEAD AND NECK CLINICAL NURSES/COORDINATORS – WHY? WHO? WHAT? WHER?

S. McDonald

St Vincent's Hospital, Melbourne

The Head and Neck Nurse Coordinator is a pivotal member of the Multidisciplinary team, but can we quantify what it is we actually do? A survey conducted online through nominees provided by members of ANZHNS 2008 and international invited speakers answers some of these questions and provides scope for the future development of Head and Neck Nurse Coordinators.



END OF LIFE ISSUES IN PATIENTS WITH HEAD AND NECK CANCER

E. Flynn

This presentation will provide information on the common presentations and evidence-based management options in patients with head and neck cancers in the terminal phase. Both common issues in end of life management for any cancer patient plus those more specific for patients with head and neck cancers will be discussed.



BUCCAL MUCOSAL CARCINOMA

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Purpose:

Buccal Mucosal (BM) carcinomas more typically occur in an environment of betel nut chewing. This review of a single centre's experience will address this infrequent malignancy.

Methods:

This Ethics approved retrospective study evaluated all patients in the Tumour Registry of the Radiation Oncology Department, Prince of Wales Hospital (POWH) Cancer Centre with a clinical diagnosis of a BM malignancy. Start date of the study was 1967 with all patients registered to 2006, thus with a minimum follow up of two years. Eligibility for review was defined as those patients who were newly diagnosed and had definitive treatment at POWH. Material collected for analysis included patient, disease, and treatment factors, with end points defined as achievement of local and regional control and defining the cancer specific survival.

Results:

Of 50 patients seen 31 were eligible with 18(58%) females and 13(42%) males. Median age was 66 years, with 8(26%) as 'never' smokers. The disease was T1,T2 in 58% of patients,T3,T4 in 36%, with 23 patients (74%) being N0. Treatment consisted of surgery in 10 (32%), radiotherapy in 7(55%) and combined treatment in 10. Whilst a complete response occurred in 25(81%) 11 recurred locally, and 4 had nodal recurrence. Salvage treatment took place in 9 patients with further local recurrence in 3 and nodal recurrence in 2, such that ultimate local control was 64.5%. 13 patients(47%) ultimately died due to their buccal mucosal carcinoma.

Conclusion:

BM carcinomas have a different natural history with a predominance of females, and a high proportion of non-smokers. Local control is difficult to achieve in this population treated over many years.



TREATMENT OUTCOMES IN PATIENTS WITH T1-2 N0 SCC OF THE ORAL TONGUE (OTSCC): A RETROSPECTIVE STUDY

S. Brennan, J. Corry, S. Kleid, J. Reynolds and L. J. Peters

Division of Radiation Oncology, Peter MacCallum Cancer Centre (PMCC) Centre for Biostatistics and Clinical Trials (BaCT)

Purpose:

Oral tongue cancer is associated with a high risk of occult neck disease, high regional relapse rates and low salvage rates. However elective neck treatment with radiotherapy or surgery for early oral tongue cancer remains controversial. In a recent report from PMCC the relapse rate following intraoral excision alone was 45% with only 41% of patients relapsing in the neck alone being successfully salvaged.

Methodology:

A retrospective review of treatment outcomes in 54 patients treated at PMCC (Jan 2002-Dec 2006) with T1-2, N0 oral tongue squamous cell carcinoma to determine recurrence-free survival and overall survival rates. The treatment policy at PMCC is to deliver radiotherapy to the primary site and neck in patients with margins less than 5 mm, perineural or lymphovascular invasion or greater than 7 mm muscle invasion. Patients not requiring radiotherapy proceed to elective neck dissection. These pathological prognostic factors were studied to determine their impact on recurrence free and overall survival.

Results:

66 patients post surgery for node negative early tongue cancer were reviewed. Locoregional recurrences occurred in 3/12 (25%) patients post elective neck surgery, 5/26 (19%) post elective neck radiotherapy and in 12/16 (75%) patients who had observation only. Two patients in the elective neck surgery group had radiotherapy to the primary site because of close margins or greater than 7 mm muscle invasion.

Conclusion:

The high loco-regional relapse rate reflects the need for better prognostic markers in early stage oral tongue cancer, and for more aggressive treatment in at least a sub-set of patients.



THE SHRINKING EVIDENCE FOR MANAGING ORAL TONGUE CANCERS

D. Wiesenfeld

Oral tongue is the most common site for oral cancer in Victoria , with 103 new cases in 2005. In that year 29 patients died of oral tongue cancer . Management is principally surgical with adjuvant radiotherapy and chemotherapy for advanced disease. Guidelines for management are available, but questions remain with regard to :-

- Pre-operative tumour assessment
- appropriate surgical margins
- the impact of close and positive margins and what to do about them
- the role of radiotherapy and chemoradiotherapy for patients with close or positive margins

The literature whilst helpful, is not conclusive.



FUTURE OF RADIOTHERAPY DELIVERY - IMRT, IGRT AND ART: BETTER OUTCOMES, LESS TOXICITY, MORE WORK?

M. Ng

Significant advances in head and neck radiotherapy delivery have taken place over the last two decades. The advent of CT planning in the late 1980s, conformal radiotherapy in the 1990s, and IMRT in the millennium have resulted in the development of highly conformal and complex radiotherapy plans. Studies have shown IMRT to provide equivalent tumour control compared to conventional techniques and a reduction in toxicity such as xerostomia. Since mid 2000, radiotherapy is taking the next step forward: image guided radiotherapy (IGRT). With the ability to image patients during their radiotherapy treatment, we are becoming aware of changes in tumour size, shape and patients anatomy. There is an increasing awareness that the complex radiotherapy plan designed prior to starting radiotherapy may not be the treatment delivered because of these changes; possibly resulting in decrease dose to the tumour and increase dose to normal tissues. Methods are being developed to 'adapt' radiotherapy to geometric changes over time (ART). ART has much potential to revolutionize radiotherapy delivery with the end aim to improve therapeutic efficacy. However it still remains in the realms of research with significant increases demands on staff and hospital resources.

HEAD & NECK 2008 4 - 6 September



FIBER-BASED THULIUM LASER SURGERY IN THE LARYNX: A NEW APPROACH.

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- ³ Queensland Centre for Otolaryngology & Voice, Fortitude Valley, Queensland, Australia
- ⁴ Wellman Centre for Photo-medicine, Boston, Massachusetts, USA

Purpose:

The carbon dioxide(CO2) laser is the mainstream instrument for cutting and ablation in endolaryngeal surgery. However, tangential dissection has been limited by the lack of a fiber-based delivery system. To address this limitation, a diode-pumped solid-state laser with a thulium-doped yttrium-aluminum-garnet laser rod was used. It produces a continuous-wave beam at wavelength 2013nm and has a target chromophore of water. This new laser functions similarly to a CO2 laser with the benefit of delivery through a small glass fibre (0.365 to 0.550 mm).

Methods:

A prospective pilot trial was performed in 74 cases to explore this applications of the thulium laser. Thirty-two office-based procedures were performed with the laser used as an ablating instrument under topical anesthesia through a flexible laryngoscope (papillomatosis, microinvasive carcinoma, benign supraglottic lesions, edema, granuloma). Forty-two procedures used the laser as a cutting or ablating instrument for microlaryngeal dissection under general anesthesia (27 partial laryngectomies and 8 posterior glottic laryngoplasties, 7 other microlaryngoscopies).

Results:

The thulium laser was used effectively in all cases. In microlaryngeal dissection, diathermy was neverrequired to control bleeding, even in the highly vascular paraglottic space. No complications related to the use of the thulium laser were experienced.

Conclusions:

The fiber-based delivery system of the 2013-nm thulium laser shows substantial promise for tangential dissection during microlaryngoscopy and soft-tissue photoablation during office-based laryngoscopy. Haemostasis was superior to experiences with the CO2 laser. In this pilot study, performing en-bloc laryngeal cancer resection procedures was facilitated by the thulium laser.



ROBOTIC SURGERY FOR TREATMENT OF HEAD AND NECK MALIGNANCY IN AUSTRALIA

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Purpose:

The paper describes the development of robotic surgery in management of head and neck malignancy, patient selection and technique of surgery. The author's department is the first in Australia to perform Trans Oral Robotic Surgery and wishes to explain the rationale for it's introduction.

Methodology:

Surgical approaches to management of oral, oropharyngeal, laryngeal, salivary gland and thyroid malignancy are discussed

Conclusions:

Robotic surgery allows extreme stereoscopic magnification, enhanced manipulation skills and access to areas inside the upper aerodigestive tract in a far superior manner to other techniques. Improved tissue resection with reduced framework injury and more rapid recovery is seen. We are able to show comparably good quality of life and reduced morbidity from this technique.



HEAD & NECK 2008 4 - 6 September



POSTERS





INTEGRATED CANCER SERVICE DELIVERY – VIRTUALLY THERE?

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Introduction:

Recently in Victoria there has been a large amount of work involving clinicians, researchers and government, in relation to the establishment of a Cancer Services Framework (CSF) for the state. The centrepiece of the CSF is the provision of co-ordinated, best practice, multi-disciplinary care for patients with cancer, via the establishment of 9 Integrated Cancer Services (ICS).

This paper presents the result of a literature review in relation to healthcare delivery via this model, which is quite a radical departure from the traditional model of services delivered within organizational silos.

The aim of the research is to extract key lessons for the ICS' to facilitate their ongoing development, and in turn to deliver better services for our patients.

Methods:

The question being asked was – what are the barriers to the successful provision of healthcare delivery via a virtual model? A literature search was conducted of the PubMed medical, science and health services literature database for publications in the last 5 years, using the terms "virtual" and ["health" or "healthcare"]. The search returned 755 results. These were narrowed down to relevant articles related to service delivery and care models and then analysed.

Results:

The key findings of the review were that there are some key barriers to the delivery of healthcare in a virtual model that include:

Insufficient or inappropriate IT support

Issues around micro politics and organizational dynamics

Governance and privacy issues

Discussion:

This research has highlighted key issues that need to be addressed in order to successfully establish the ICS model, and achieve the intended improvements in cancer care. The findings fit with operational experience in establishing the model, and act as a lens to focus attention on the most important pieces of work that need to be completed in order to achieve successful implementation.

Keywords - virtual, organization, healthcare, cancer, health.



MARGINAL MANDIBULAR NERVE INJURY FOLLOWING NECK DISSECTION AND ITS IMPACT ON PATIENT PERCEPTION OF APPEARANCE

M.D. Batstone, B. Scott, D. Lowe and S.N. Rogers

Background:

Neck dissection to remove cervical lymph nodes is common practice in head and neck cancer management. The marginal mandibular nerve may be injured during neck dissection, particularly of level 1. The rate of injury to this nerve is under reported in the literature and its impact on patients is not well defined.

Methods:

An observational study was undertaken on patients who had undergone neck dissection over a 5 year period. Patients with segmental resection of the mandible, lip split and buccal carcinomas were excluded. The patients were examined for weakness and given a questionnaire related their perception of their appearance and their function.

Results:

Sixty six patients were identified who had undergone 85 neck dissections. The rate of House Brackmann injury was 18% when analysed by patient and 23% by neck. There were moderate correlations between observed injury and subjective responses to questions relating to ability to smile and weakness of the lower lip. Specific patient groups were more distressed about their appearance.

Discussion:

The rate of smile asymmetry following neck dissection is relatively high, however, severe injuries to the marginal mandibular nerve are uncommon. Other factors (including dental status) impact on the patients' perception of their appearance.



CUTANEOUS SQUAMOUS CELL CARCINOMA: INCIDENCE OF METASTASIS AND PERINEURAL AND/OR INTRANEURAL INVASION AS A PROGNOSTIC FACTOR

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Purpose:

Perineural invasion (PNI) in cutaneous SCC is a prognostic indicator for increased tumour aggressiveness, and propensity to metastasise. This study aims to quantify the incidence of metastasis and the prognostic significance of PNI and intraneural invasion (INI) in cutaneous SCC.

Methodology:

Consecutive cases of histologically confirmed cutaneous SCC were culled from all public and private pathology laboratories within the Central Region of New Zealand from the 1st January 1997, to 30th June 2004, with a minimal follow up of 18 months. Specimens were analysed for the presence of PNI and/or INI, with logistic regression used in the analysis and generation of odds ratio.

Results:

There were 8,526 primary and 139 metastatic SCC over the study period yielding a metastasis rate of 1.6%. The rate of metastasis from head and neck cutaneous SCC was 2.1%. INI and/or PNI increased the likelihood of metastasis from primary cutaneous SCC by 6 times (95% CI: 3.8 - 10.4; p=0.0001). Lesions displaying INI increased the likelihood of metastasis by 14 times (95% CI: 3.5 - 56.9; p=0.0002). The presence of PNI increased metastasis likelihood by nearly 3 times (95% CI: 1.5 - 4.5; p=0.0006).

Conclusion:

We report a 1.6% metastasis rate for cutaneous SCC in the New Zealand population. The presence of INI and/or PNI significantly increases the likelihood of metastasis from cutaneous SCC. A more aggressive treatment approach and/or increased surveillance for patients with SCC displaying these histological features may be justified.



OUTCOMES ANALYSIS OF A COLLABORATIVE ENT & SPEECH PATHOLOGY FIBREOPTIC ENDOSCOPIC EVALUATION OF SWALLOWING (FEES) SERVICE

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Fibreoptic Endoscopic Evaluation of Swallowing (FEES) has evolved to become a comprehensive tool for evaluating oropharyngeal dysphagia (Wilson, Hoare & Johnson, 1992; Langmore, 2001). FEES is ideally suited to diagnosing oropharyngeal dysphagia and investigating therapeutic strategies, particularly with head and neck cancer patients (Langmore, 2001). At St. Vincent's Melbourne, the ENT Unit and Speech Pathology department conducted a 12 month retrospective patient review of FEES assessments during 2007-2008. The review was aimed at evaluating patient selection for a FEES assessment, evaluating the impact of the FEES assessment on dysphagia management and as a patient educational tool and evaluating patient and staff satisfaction with the FEES service. In the 12 month period 45 patients had a FEES assessment conducted in the ENT Outpatient clinic (17 inpatients & 28 outpatients). 64% of patients were ENT patients, of these 35% were Head and Neck cancer patients. The review compiled FEES assessment results and outcomes of education sessions and collated feedback from patient surveys and staff surveys to assist with future FEES service provision, particularly for the ENT/Head and Neck cancer patient population.

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DEVELOPMENT OF A TEMPLATE TO TRANSFER OF ALLIED HEALTH AND NURSING INFORMATION

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*WCMICS Head & Neck Allied Health/Nursing group

This paper describes a project undertaken by the Western & Central Melbourne Integrated Cancer Service Head and Neck Allied Health/Nursing sub-group. The group identified inconsistencies in patient handover, and recognised duplications and gaps in information when patients with Head and Neck cancer transfer from one hospital site to another. This can impact on a patient's quality of care and follow-up by the multidisciplinary team.

In order to address this, the objective of the project was to develop a common template to communicate consistent information regarding patient progress and treatment plan between hospitals, to GPs and community health staff at discharge.

The template aims to reduce duplication and omissions in current communication such as the individual discipline handover, documentation and hospital discharge summary. This template could be updated each time the patient is seen and at each stage of treatment.

The template is completed at each site and then emailed or faxed to the relevant staff member at the next hospital and/or the GP with a summary of the multi-disciplinary treatment and the plan for follow-up. The document is filed in the correspondence section of the medical record at both sites

The paper will report on the development of this common template, findings of the three-month trial, any changes required and how the template may be used more broadly in the future.



Developing a Web based Head and Neck Cancer Special Interest Group for Speech Pathologists

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Purpose:

At a national level, the demand for speech pathologists with cancer care experience is ever increasing. There is limited undergraduate training of speech pathologists within this area. There also exists a gap between the current literature and current best practice within this evolving field of speech pathology. Experienced and inexperienced speech pathologist managing head and neck (H&N) cancer patients are located across all health care settings, in regional, rural, and remote areas. They may work in isolation with limited support from peers. As such, the need for an easily accessible, nation wide forum for speech pathologists to share knowledge, bench mark best practice and network was needed.

Methodology:

The process in developing the special interest group involved;

- 1) The review of existing state and national H&N special interest groups
- 2) Determining the number of speech pathologist who listed H&N cancer as an interest area from the Speech Pathology Australia data base.
- 3) Identifing a gap of support and a need for such an interest group.
- 4) Bench marking how other national special interest groups are organised and determining the best forum to use.
- 5) Launching the interest group at the 2007 ANZHNS.
- 6) Advertising of the group to speech pathologists.
- 7) Managing the interest group and generating topic discussions.
- 8) Surveying the needs of members.

Results:

In September 2007, 14 members were registed with the group. Currently, (June 2008) 71 members are registered with the group. Members cover all clinical settings from remoted community health to tertiary teaching hospitals within Australia, New Zealand and Asia.

Conclusions:

A national and international web based special interest group for speech pathologists managing head and neck cancer patients now exists. The group facilitates support, information, and discussions on speech pathology issues in H&N cancer. It is an easily accessible forum for all interested speech pathologists across Australia/ New Zealand and Asia to share their knowledge, continue their own learning, and be up to date with current national and international practice.



DEVELOPING AND STANDARDISING EVIDENCE BASED BROCHURES FOR HEAD AND NECK CANCER PATIENTS UNDERGOING CHEMORADIATION AND OR DEFINITIVE RADIOTHERAPY AND FACT SHEETS FOR CLINICIANS MANAGING THESE PATIENTS

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Purpose:

Australia-wide there is an increased demand for speech pathologists with knowledge of the communication and swallowing difficulties that arise from chemoradiation and/ or definitive radiation therapy for head and neck cancer. Patients receiving treatment for complex head and neck cancer are treated in tertiary, metropolitan centres where speech pathology staff have access to education and resources. Unfortunately when patients are discharged back to their regional centre, many of this knowledge and access to resources is limited. The projects aim was to improved state-wide access to clinical resources, and thus improve the standard and consistency of patient care.

Methodology:

A national survey was sent to speech pathologists managing head and neck cancer patients to benchmark service delivery, information provided to patients, clinician experience and perceived. Regional, rural and remote clinicians were questioned on the required content for standardised and evidence based patient brochures and clinician fact sheets.

Results:

Current service delivery methods, clinician knowledge and speech pathology specific patient handouts vary across radiationoncology units and speech pathology departments. In Queensland and many other states, no standardised speech pathology brochures for patients undergoing chemotherapy and/ or definitive radiation therapy exist. Speech pathologists state-wide identified a need for easier access to evidence- based resources for education.

Eleven standardised, evidence-based patient brochures and twelve clinician specific fact sheets detailing swallowing and communication sequale from chemoradiation and/or definitive radiation of the head and neck were developed. In July 2008 these will be uploaded onto the Queensland Health web site for easy access by regional, rural and remote clinicians.

Conclusions:

The radiation and chemoradiation clinician fact sheets and patient brochures developed, will improve clinician knowledge and standardised information for head and neck cancer patients undergoing radiation and/ or chemoradiation on the likely side effects that impact communication, swallowing, lifestyle changes and long-term functions.



ANATOMIC VARIATIONS OF THE MARGINAL MANDIBULAR NERVE

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Purpose:

Marginal Mandibular Nerve (MMN) is a branch of the facial nerve, which is encountered during neck surgeries. The purpose of this study was to identify the branching pattern and variations in the position of MMN.

Methodology:

202 patients who underwent neck dissection at the author's center were included in the study. During the course of neck dissection, the MMN was first identified around the point where the facial artery crossed the lower border of the mandible. Once the nerve was identified, it was traced both backwards and forward till the whole nerve was exposed. Position of the nerve, its relation to lower border of mandible at the point where the facial artery crossed the lower border of the mandible and number and position of its branches were recorded.

Results:

In 161of the 202 patients (79.7%) the MMN had a single division. Two divisions were noted in 26 patients (12.9%). Three divisions for MMN are not uncommon, it was noted in 14 patients (6.9%) and in one patient there were 4 divisions. The mean distance from the lower border of the mandible to the point where the marginal mandibular nerve crossed the facial artery for all the branches taken together was 1.73 mm below the mandible.

Conclusion:

The point where the facial artery crosses the lower border of the mandible is a reliable landmark to locate the MMN. Every effort should be made to preserve all the branches of MMN to ensure cosmesis and decrease morbidity.



OPTICAL COHERENCE TOMOGRAPHY VISUALIZATION OF MUCOSAL RADIATION DAMAGE IN PATIENTS WITH HEAD AND NECK CANCER

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Mucositis is the debilitating side effect and a limiting toxicity of chemoradiation therapy (CRT) in patients with head and neck cancer This study objective was to estimate dynamics of normal oral mucosa in CRT using a new noninvasive imaging modality – optical coherence tomography (OCT), which creates real time cross-sectional images of tissues at a depth up to 2 mm with spatial resolution from 10 to 15 μ m. Nineteen patients with stage II-IV of oropharyngeal cancer completed the prospective study. OCT monitoring was performed daily starting from the first day of irradiation in two points of right and left cheek. OCT image of a normal cheek mucosa distinctly shows layers, relevant to epithelium, lamina propria and submucosa. The fact of the clear interface between epithelium and submucosa at the first day of clinical manifestation of mucositis is a predictor of the light grade of the complication. The absence of OCT image's contrast that correlated with the first signs of mucositis, is a good criterion for further development of severe mucosatis. Dynamics of OCT images provides indirect information about radiosensitivity of oral mucosa, allowing to predict the severity of mucositis in the course of CRT.



TONGUE FLAP REPAIR- THE SECRET TO CONSERVING TONGUE FUNCTION AFTER CANCER RESECTION

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Purpose:

To demonstrate the principles of tongue flap repair, detail the benefits of this procedure and by video presentation of patients the day following surgery prove the efficacy of this technique.

Methodology:

Consideration of the anatomy of the tongue, and in particular it's unique blood supply through a series of perforating vessels derived from the lingual artery inspired the development of reconstructive flaps following cancer resections producing a smaller tongue of similar shape to the original tongue. The separate sensory innervation to the posterior third and anterior two thirds of the tongue can be exploited and used to advantage to produce a sensate repair, and this equates to better tongue function.

Results:

It was discovered that even without speech therapy to enhance tongue function, tongue flap repair resulted in better speech in the early post operative period than other forms of repair, and more rapid return to oral nutrition.

Conclusions:

Utilizing tongue remnants for reconstruction following resection of T1 and T2 anterior tongue tumours results in better tongue function than other forms of flap repair.



THE USE OF STAPLER FOR PHARYNGEAL CLOSURE IN TOTAL LARYNGECTOMY

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Purpose:

The use of stapler for the mucosal closure after total laryngectomy is being presented here. The indications are pure endolaryngeal carcinoma and the contraindications are carcinoma larynx with lesion involving the pharyngeal mucosa or with posterior extension or with subglottic spread.

Methodology:

A 75mm Johnson and Johnson stapler was used for the closure. After the skeletonisation of the larynx and dissecting out the pharyngeal mucosa from the laryngeal framework the stapler was applied between the larynx and the pharyngeal mucosa and the laryngectomy performed without opening up the pharyngeal mucosa.

Results and conclusions:

We have used the stapler for the pharyngeal closure after total laryngectomy for 30 cases of carcinoma larynx. The Problems of conventional closure in laryngectomy are it is time consuming, there is individual variation in the technical skill and the chance of field contamination. The stapler closure of the pharyngeal mucosa is technically easy to perform; there is no contamination of operating field, and results in a perfect suture line. This is less time consuming. It does not increase the rate of fistula and early oral feeding can be started which in turn results in early convalescence. Primary phonatory rehabilitation with tracheo esophageal prosthesis is feasible. Out of the 30 patients we have used this technique, for six patients we have done TEP and voice prosthesis insertion along with this.



PLUGGING THE HOLE: IN PURSUIT OF CONSISTENT, EVIDENCE BASED, MULTIDISCIPLINARY TRACHEOSTOMY CARE

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The Canberra Hospital ACT

Purpose:

Variations in clinical management, inconsistent application of evidenced based practice and adverse events with patients with tracheostomies at The Canberra Hospital (TCH) led to a project reviewing the management of these patients. The principal aim was to promote a consistent, evidence based, multidisciplinary team approach to the care of tracheostomised patients, benchmarking against other institutions where appropriate.

Methodology:

- Development of a multi-disciplinary advisory group (Tracheostomy Interest Group TIG) including Speech Pathology, Nursing, Physiotherapy and Medical representatives.
- Review of tracheostomy practices and clinical management issues identified via workshop
 of clinicians and literature review.
- Development of an evidence based tracheostomy management guideline and observation chart.

Results:

- Tracheostomy management guideline and observation chart developed and implemented throughout TCH.
- · Guideline and observation chart incorporated into staff education programs
- Acknowledgement of TIG expertise by TCH clinical review committee and endorsement of group by Clinical Board
- Expansion of TIG role has included review and cessation of blue dye use by speech pathology and development of a laryngectomy resource folder.

Conclusions:

Significant changes have been made in tracheostomy practices across TCH since project commencement in 2005. These changes are currently being incorporated into policies and procedures. The quality cycle continues with the evolution of TIG into TRACS, a multi-disciplinary clinical advisory service continuing to progress evidence based tracheostomy care, providing advice on patient care, nursing and medical staff training and procurement.



DIETITIAN/ NURSE LED CLINIC FOR HEAD AND NECK CANCER PATIENTS – AN INNOVATIVE MODEL OF CARE

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Background

Up to 50% of head and neck cancer patients have malnutrition on presentation. Side effects from chemo-radiotherapy treatment further compound pre- existing malnutrition with severe weight loss during treatment affecting up to 58% of patients. Current evidence indicates nutrition intervention should occur within the first five days of treatment, weekly follow up during radiotherapy(RT) and fortnightly follow up in the acute recovery phase.

Purpose

- 1. To assess the percentage of head and neck cancer patients undergoing radiotherapy treatment receiving nutritional care within best practice parameters.
- 2. To assess the number of unplanned head and neck patient admissions associated with nutritional management.

Methodology

A retrospective audit over a 3 month period was undertaken to investigate nutritional care.

A prospective audit was undertaken of all head and neck admissions over a 2 month period investigating nutrition related unplanned admissions.

Results

Retrospective audit of nutritional care:

	Percentage	Standard (%)
First contact within 5 days of RT	32	100
Weekly follow up during RT	8	100
Fortnightly follow up in acute recovery phase	23	100

The reason identified for the suboptimal rates was limited access to Dietitian outpatient services with seventy-three percent of patients were unable to obtain an appointment when clinically indicated.

The prospective audit revealed a 22% rate of unplanned admissions related to nutritional management.

Conclusion

The nutritional care needs of head and neck patients were not being met. A dietitian/ nurse led clinic has been funded based on the audit findings with the aim of evaluating preliminary patient outcomes of this innovative model of care.



GENDER DIFFERENCES IN ADJUSTMENT FOLLOWING TOTAL LARYNGECTOMY

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Purpose:

The impact of total laryngectomy on an individual's life has traditionally been measured from a male viewpoint reflecting the demographics of a diagnosis of laryngeal cancer. A small number of studies look specifically at females but few are comparison studies. Consequently, there is little research regarding gender differences. This poster presents results of a retrospective study investigating gender differences in perceptions of global quality of life (QOL) and functional abilities following total laryngectomy.

Methodology:

43 participants (22 males/21 females), who had total laryngectomy at least one year previously. The European Organisation for Research and Treatment of Cancer Core Questionnaire Version 3.0 (EORTC QLQ-C30) and the disease-specific Head & Neck Cancer Module (QLQ-H&N35) were completed. Six males and seven females volunteered additional information through interview.

Results:

Global QoL is significantly higher in males than females. Males were found to have significantly higher levels of physical, emotional, cognitive and social functioning than females. There was a general trend for females to have higher symptom/impairment levels and reported more treatment-related problems. Although significantly more females lived alone and changed their employment status following surgery, these demographic differences were not found to significantly affect QoL.

Conclusions:

Following total laryngectomy, there appears to be gender differences in perceived QoL. Female subjects' ratings of global QoL and functional abilities were perceived to be significantly lower. Findings imply that rehabilitation for women may involve different aspects more specifically related to gender based issues following total laryngectomy.



DEVELOPMENT AND IMPLEMENTATION OF AN AUDIT TOOL TO MEASURE ALLIED HEALTH AND SPECIALIST NURSING INPUT FOR HEAD & NECK CANCER PATIENTS ACROSS THEIR CONTINUUM OF CARE

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*WCMICS Head & Neck Allied Health/Nursing group

This paper describes a project undertaken by the Western & Central Melbourne Integrated Cancer Service, Head and Neck Allied Health (AH) & Nursing sub-group. The group identified the need to measure the AH and specialist nursing input for Head & Neck (H&N) cancer patients across the continuum of care and compare this against best practice guidelines/available evidence.

This project undertook the development and pilot testing of an agreed audit tool to measure the AH and Specialist Nursing interventions, in terms of occurrence (did they occur), timeliness, frequency, location, length of consultation, and method of referral. This audit tool was piloted at four Melbourne Hospitals (Peter MacCallum Cancer Centre, Royal Melbourne Hospital, St Vincent's Hospital and Western Hospital) for two months. A service mapping exercise was also undertaken at each site to obtain qualitative information about current service provision for H&N cancer patients, perceived gaps and areas for improvement.

This audit documented the current AH and Specialist Nursing services provided and enabled comparison with best practice guidelines from the literature. It has resulted in a clear assessment of patient requirements for AH and Specialist Nursing intervention for this group of patients and identification of strengths, gaps and areas for improvement to facilitate improved patient care and reduce duplication. The results of this project may allow AH and specialist Nursing staff to advocate for improved access to their services providing evidence to support changes in practice.



GOING HOME WITH A TRACHEOSTOMY: A GUIDE FOR PATIENTS AND CARERS

S. May

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Purpose:

Historically patients with a tracheostomy tube at Liverpool Hospital have been discharged home with informal teaching. A patient was discharged using this technique and developed a fatal airway obstruction.

Deliberations about the event concluded that 2 improvements were required:

- quality of information received prior to discharge and
- tangible evidence to support safe return home.

Methodology:

We have searched and to date have not found a book that:

- is written by clinicians for adults
- explains how to look after the most common tubes available and
- includes patient/carer competency assessment tools.

30 multidisciplinary team members and carers contributed to the development of the book.

Topics in the book include:

- anatomy
- explanation of condition
- daily considerations (e.g. showering)
- clinical care
- emergency management
- troubleshooting

Results:

The books have been evaluated by the patients/carers 1 month after discharge. 83% of responders reported that the book was very useful, and still referred to the book at least once per week.

A 19 year old patient developed an airway emergency at home. The family used the book to help them through the emergency and resulted in a positive patient outcome.

Conclusions:

The book has been sponsored, published and assigned an ISBN. It has been catalogued in Liverpool Hospital Library, and other Libraries throughout NSW. The book will also be uploaded to the Liverpool Hospital internet website by end 2008.

Commercial Affiliations or Relationships

This publication has been partially sponsored by Smiths Medical – a company that supplies Liverpool Hospital with devices including tracheostomy tubes. This subsidisation occurred after the book was drafted, and has in no way affected the content of the book. Alternative companies that have not provided sponsorship are also included in the book in an equitable fashion.



EARLY DETECTION OF ORAL MUCOSAL DYSPLASIA BY ORAL CYTOLOGY NOT POSSIBLE BY PLOIDY ANALYSIS

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- ² Oral Biology & Pathology Research Unit, School of Dentistry, University of Queensland, Brisbane

Purpose:

To compare ploidy analysis after Feulgen stained cytological thin-prep specimens with biopsy and histopathology for the assessment of oral mucosal lesions.

Methodology:

100 healthy individuals between 30 and 70 years, non-smokers, non-drinkers and not taking any medication, had two cytological specimens (cheek mucosa, lateral margin of tongue) to establish normal cytological parameters. Patients (17) with a histopathological diagnosis of lichen planus (6), leukoplakia with no dysplasia (6), leukoplakia with dysplasia (4) and OSCC (1) had lesional cytological samples taken prior to their diagnostic biopsy. Standardized Thin PrepTM's were stained by Feuglen reaction, scanned using the Aperio Scanscope, the green channel analyzed after threshold segmentation of nuclei and the intergrated optical density (ID) of nuclei taken as a measure of ploidy.

Results:

The mean of all normal samples and twice the standard deviation was used as a level for the largest "normal" ID and thus the upper ID limit of diploid nuclei. The statistic analyzed was the Log(10) of the variance (Log(10)Var) of the ID above this level. ANOVA of the Log(10)Var of the 200 normal samples showed no difference (p > 0.05) between age, gender or intra-oral site and when compared with the patients with mucosal disease showed that the patients had ID levels of aneuploidy that was statistically significantly (p < 0.05) less variable than present in normal mucosa.

Conclusion:

Ploidy assessment of oral cytology is not useful as an adjunctive prognostic factor in the analysis of the malignant potential of oral mucosal lesions.



INCIDENCE OF OSTEORADIONECROSIS OF THE TEMPORAL BONE

D. Morrissey and R.Grigg

The University of Queensland School of Medicine (Rural Clinical Division)

Purpose:

To estimate the incidence of osteoradionecrosis (ORN) of the temporal bone in patients undergoing radiotherapy of the temporal bone region and assess possible risk factors for the development of ORN.

Methods:

A retrospective audit of patient data collected over 10 years by a single surgeon was completed collecting information on demographics, nature of disease, radiation treatment regime and complications including ORN.

Results:

A total of 7 patients developed osteoradionecrosis of the temporal bone within the 10 years of the audit. This represents an incidence of 8.5%. All who developed ORN had a metastatic parotid malignancy treated operatively with subsequent radiotherapy. All malignancies were squamous cell carcinomas in those who developed ORN. Approximately 1 in 5 (7/34) patients receiving radiotherapy following a parotid malignancy of any type developed ORN in this cohort.

Conclusion:

The incidence of ORN was 8.5% among the 82 patients in this study. This is the first study to demonstrate the incidence of ORN within the temporal bone. ORN can manifest at any time following irradiation and hence such patients carry a lifelong risk. It has significant morbidity associated with its development and occasionally mortality. Given the importance of the functional contents of the temporal bone, particular care of the ear and temporal bone region must be taken following radiotherapy. Those people undergoing radiotherapy to the parotid region may be at higher risk of ORN and further work in this area is needed.



STAFF TRAINING AS QUIT[®] SMOKING FACILITATORS

*J. Moss, M. Darby and J. Byrne *WCMICS Head & Neck Tumour Group

This paper describes a project run within the Western & Central Melbourne Integrated Cancer Service Head and Neck Local Collaborating Tumour Group.

This project aimed to improve patient services through the provision of staff training in Quit Victoria's Health Professional's program. This in turn would enable each hospital to have several staff members as a resource available to assist patients, family members and other staff with smoking cessation information and strategies.

This project enabled 13 staff members from across WCMICS Hospitals to attend a QUIT facilitator training program over three two-day sessions. Course participants included nurses, allied health professionals and radiation therapists from the Head and Neck and Lung Tumour Groups and also two staff from a community health centre working with patients with cardio-pulmonary diseases.

Staff also reported that they had a better understanding of the nature of the emotional, behavioural and physical aspects addiction.

The staff evaluation survey revealed that the course was beneficial and highly relevant to staff as it gave them the knowledge, skills and interestingly, confidence to be proactive in addressing the topic of smoking cessation with their patients. Staff also felt that their improved counselling skills which were applicable across other aspects of their clinical work. The evaluation was repeated in six months time.



DEVELOPMENT OF A WESTERN & CENTRAL MELBOURNE INTEGRATED CANCER SERVICE COMMON SHARED HEAD AND NECK CANCER WEBSITE AS A RESOURCE FOR CLINICIANS, GPS AND PATIENTS AND THEIR FAMILIES.

M. McCullough, J. Moss, C. Bain and *J. Byrne

Western and Central Melbourne Integrated Cancer Service *WCMICS Head & Neck Tumour Group

This paper describes a project undertaken by the Western & Central Melbourne Integrated Cancer Service (WCMICS), Head and Neck Local Collaborating Tumour Group. Staff from the Head & Neck Cancer services at four Melbourne Hospitals participated in the project. The Hospitals involved were the Peter MacCallum Cancer Centre, the Royal Melbourne Hospital, St Vincent's Hospital and the Western Hospital.

The objective of this project was to develop a Head & Neck Cancer website as a source of current information (services and staff availability, treatment protocols, patient care pathways, diagrammatic and written patient educational information, and potentially outcome data) for hospital staff, General Practitioners and other community health workers and, most importantly, patients and their families

A small working group oversaw the project which has resulted in a live website linked via the WCMICS website to each hospital website.

Processes for, development of the site, the review of pertinent information, registration of documentation and final acceptance by the supervisory group were developed, and the roles of the group and the webmaster were delineated. The project was developed initially on a non-public site prior to deployment "live" in early March 2008. It is anticipated that this website, its developmental framework and deployment will be able to be used for future cancer service web sites. Examples of the web pages and data on usage will be provided.



A NEW CANCER SERVICES ADMINISTRATIVE ROLE: REVIEWED AND REVISED

J. Moss, M. Snow and J. Byrne

This paper describes the evaluation of a new position in Cancer Services in Melbourne. Based on initial requirements identified by the six hospitals, and in response to requests for local administrative assistance to assist and support the implementation of the *Cancer Services Framework (CSF)*, Administrative Coordinators were employed at Western and Central Melbourne Integrated Cancer Service (WCMICS) hospitals in 2006

Anecdotal feedback revealed that there had been difficulties in establishing these new positions and that expectations and realities of the roles, whilst varying across sites, had not been realised.

This review examined the roles after 12 months to make recommendations for the future of the role. A survey was sent to the Administrative Coordinators, Cancer Service Managers and Senior Cancer Clinicians with a 56% response rate overall. A focus group was also held with the Administrative Coordinators.

Hospital staff and the Administrative Coordinators felt that specific activities such as assistance with the multi-disciplinary team (MDT) meetings, support for the Tumour Streams and assistance with project applications and activities had been successful outcomes.

The results revealed that whilst this was a valuable position, there had been challenges in implementing the role and progress had been slower than anticipated. Lack of clarity around the role relating to the position description, isolation of the position and difficulties with prioritisation of responsibilities due to lack of clear direction and professional support were issues that were identified as problematic.

Recommendations and an implementation plan were accepted by the CEO Governance group and these included continuation of the positions for 12 months, clarification of the role description, reporting lines, work-plan, professional support and performance development and review and strengthened communication by formalised monthly meetings. The evaluation will be repeated at the completion of the second year.



A NEW MODEL OF CARE FOR CANCER SERVICES

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Integrated Cancer Services are regional collaborations set up in three metropolitan and five regional Victorian sites. These have been established by the Department of Human Services (DHS) to implement the Government's *Cancer Services Framework* across Victoria. The Framework outlines an integrated services model for metropolitan and regional cancer services, which focuses on delivering the right treatment and support to patient as early as possible and throughout their cancer journey.

The WCMICS comprises of Melbourne Health, the Peter MacCallum Cancer Centre, Royal Women's Hospital, St Vincent's Health Melbourne, Western Health and Werribee Mercy Hospital.

This poster describes this new collaborative approach to cancer services in our region. It provides information relating to the Victorian Government's Cancer Services Framework and the four key priority areas: multi-disciplinary care, care coordination, psychosocial care and support, and reducing variations in care.

It also describes the structure for the Western and Central Melbourne Integrated Cancer Service (WCMICS) and the main strategy for driving the priorities, the Local Collaborating Tumour Groups. Staff information and contact details are included.



THE LYMPHATIC DRAINAGE OF THE NASAL FOSSAE AND NASOPHARYNX: A PRELIMINARY ANATOMICAL AND RADIOLOGICAL STUDY WITH CLINICAL IMPLICATIONS

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Background:

The lymphatic pathways of the nasal cavity are of enormous clinical importance. To date there has been no accurate radiographic record of these pathways.

Methods:

Four halves of the head and neck from two fresh human cadavers were studied. Using the 6% hydrogen peroxide to find the inflated initial lymph vessels. A suitable vessel was injected with a suspension of radio opaque lead oxide and powdered milk. The specimen was then photographed and radiographed

Results:

The capillary network arises from the mucous membrane of the atrium, the turbinates, the floor of the nasal cavity and the nasopharynx. They drain to the lateral pharyngeal and retropharyngeal lymph nodes. One lymphatic communication is at the junction of the lateral wall of the turbinates and nasopharynx. Another communication was found between two groups of lymph nodes situated between the origin of the facial artery and the bifurcation of the carotid artery. Multiple first tier lymph nodes were found in the lateral pharyngeal and retropharyngeal groups.

Conclusions:

A rich avalvular lymph capillary network exists in the mucous membrane and two major lymph collecting vessels course through the parapharyngeal space to multiple first tier lymph nodes. These results, previously not described, may help with the treatment of patients with cancer of the nasal fossa and nasopharynx.



WEIGHT LOSS IN HEAD AND NECK CANCER (HNC) PATIENTS BETWEEN SURGERY AND ADJUVANT RADIOTHERAPY

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Purpose:

Malnutrition is common in HNC patients affecting up to 40% upon diagnosis¹. Patients requiring enteral feeding post-surgery at PAH are routinely referred for dietetic intervention. Patients immediately commencing oral intake however are rarely referred. The purpose of this audit was to determine whether patients commenced on oral intake post-op, who are not referred for dietetic intervention, lose weight after discharge.

Methodology:

Body weight before surgery, weight at planning or first week of radiotherapy, age, gender, diagnosis and surgical intervention were recorded from a retrospective chart audit of HNC patients who received surgery at PAH. Patients who required enteral nutrition post-surgery, had diagnostic procedures only or had dietetic intervention during hospital admission were excluded.

Results:

Average age for the sample was 59, with 80% (n=15) males. There was a difference of 2.5kg in mean weight pre-surgery (81.1 \pm 16.7kg) versus commencement of radiotherapy (78.6 \pm 14.9kg). Paired t-test analysis concluded that the difference in weight was not significant (p=0.191). Although average weight change was not clinically significant, three patients lost >10% body weight.

Conclusion:

HNC patients commencing oral intake post-surgery do not require routine dietetic input before discharge. Some patients are at risk of deterioration in nutritional status. This subgroup can be identified by close monitoring of weight post-op and in outpatient clinics. Any decrease in weight can be referred to the dietitian for nutrition assessment to optimize outcomes for radiotherapy.

1. Mangar, S. et al. Evaluating predictive factors for determining enteral nutrition in patients receiving radical radiotherapy for head and neck cancer: A retrospective review. Radiotherapy and Oncology 2006; 1-7.



PREDICTORS OF ACUTE GRADE IV SWALLOWING TOXICITY IN PATIENTS WITH STAGES III AND IV SQUAMOUS CARCINOMA OF THE HEAD AND NECK TREATED WITH RADIOTHERAPY ALONE

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Purpose:

The purpose of the study was to investigate the predictive factors for acute grade 4 swallowing toxicity (those requiring enteral feeding) during curative radiation treatment for localised Stages 3–4 squamous cell carcinoma of the head and neck. It was hypothesised that craniocaudal length of the treatment field to the upper neck and pharynx would correlate with grade IV swallowing toxicity.

Patients and methods:

Toxicity data for 350 patients were collected prospectively as part of a phase III randomised trial (TROG 91:01) that randomly assigned patients to either conventional (2 Gy per day to a dose of 70 Gy in 35 fractions) or accelerated radiotherapy (1.8 Gy twice a day to a dose of 59.4 Gy in 33 fractions). Potential factors were analysed that predicted for grade IV swallowing toxicity.

Results:

The probability of grade IV swallowing was 36% if the phase 2 treatment length was >82 mm vs 16% for less 682 mm (p = 0.0001). A predictive enteral grading score (PEG score) was derived using the Cox regression coefficients which considered field length of the boost volume, stage grouping, altered fractionation, ECOG. The PEG score was 45% if the score was P6 and 19% if the score was <6 (p = 0.0).

Conclusions:

More attention needs to be focused on developing robust dose and volume constraints for the pharyngeal mucosa and the musculature in order to reduce the need for enteral feeding. Patients with PEG score of 6 or greater are at high risk of requiring enteral feeding during radiation treatment and should be considered for prophylactic enteral feeding.



OESTROGEN RECEPTOR BETA IS THE MAJOR OESTROGEN RECEPTOR IN PLEOMORPHIC ADENOMAS OF THE PAROTID GLAND

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Purpose:

Pleomorphic adenomas of the salivary gland have a gender bias and age distribution suggesting oestrogen may be an aetiologic agent. However, studies of oestrogen receptor (ER) α expression in normal and tumour tissue of the salivary gland have yielded inconsistent results. Our aims were to determine expression patterns of the recently described ER β in pleomorphic adenomas and normal parotid gland tissues and to seek associations with ER α expression, patient age and gender.

Methods:

Semiquantitative immunohistochemistry was carried out on paraffin sections of pleomorphic adenomas from 49 patients (36 females, mean age 48 years), using the ER α Clone 1D5 antibody and ER β antibodies (14C8 and PPG5/10). Experimental and clinical data were compared using conventional statistical methods.

Results:

ER α and ER β expression was largely confined to the nuclei of ductal cells in normal tissues and the epithelial components of pleomorphic adenomas. Overall, ER β was expressed in approximately 70% of normal tissues and 90% of pleomorphic adenomas. The mean staining score in tumours was significantly higher than in normal tissues. Corresponding positivity rates for ER α were 37% and 49%. The mean staining score for ER α in tumours was higher than in normal tissues, but lower than that for ER β . There was preliminary evidence of associations between ER expression, patient age and gender.

Conclusions:

This is the first study of ER β in pleomorphic adenomas of the salivary gland. Findings support ER β as the major ER in salivary gland tissues, and provide evidence that ER β may have a role in the development of this disease.



EXPERIENCE OF LARYNGECTOMIES AT ROYAL MELBOURNE HOSPITAL FROM 2001 TO 2006

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Purpose:

To assess the presentation staging and volume of laryngeal cancer surgery per annum following the VA study of 1991 at the Royal Melbourne Hospital in Melbourne Australia between the years of 2001 to 2006.

Methodology:

A retrospective study of 62 patients with advanced laryngeal cancer who received total laryngectomies +/- pharyngectomies at the Royal Melbourne Hospital in Melbourne Australia between 2001 and 2006.

Results:

The primary tumour was T1 in 3 patients, T2 in 4 patients, T3 in 16 patients, T4 in 35 patients and unknown in 4 patients. 27 patients had positive nodes. 41 of the cancers were supraglottic, 19 glottic and 2 infraglottic. Forty two patients presented with initial disease, 20 with recurrent disease. Three patients were clinically stage 1, 1 patient stage 2, 3 patients stage 3, 43 patients stage 4a, 2 patients stage 4b, and four patients staging unknown. Nine operations were performed in 2001, 10 in 2002, 11 in 2003, 9 in 2004, 13 in 2005 and 10 in 2006.

Conclusion:

The majority (87.9%) of patients presented with advanced stage 3 or 4 disease, 32.3% of these patients were for recurrent disease. After an initial significant reduction in laryngectomies for early disease in the early 1990s, the procedure has remained a stable part of the Head and Neck treatment armamentarium at the Royal Melbourne Hospital in Melbourne Australia.


ALTERATIONS IN MIRNA PROCESSING AND EXPRESSION IN PLEOMORPHIC ADENOMAS OF THE SALIVARY GLAND

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Purpose:

To determine the expression and role of miRNA genes in pleomorphic adenomas of the salivary gland.

Methodology:

16 matched pairs of pleomorphic adenomas and normal salivary gland tissues were subjected to genome wide miRNA gene expression analysis.

Results:

Genome wide microRNA (miRNA) expression profiling of salivary gland pleomorphic adenomas revealed a distinct expression signature consisting largely of upregulated miRNAs compared to matched normal tissue. Some of most highly upregulated miRNAs (> 10 fold change) in pleomorphic adenomas were miR-140-5p, miR-99b, miR-140 and miR-299-3p. In comparison, two of the most significantly downregulated miRNAs in tumours were miR-375, miR-144 and let-7a. Five miRNA genes upregulated in the tumours were found to be associated with fragile sites and/ or cancer associated genomic regions, which could account for these changes. However, q-RTPCR revealed a profound increase in the expression of components of the miRNA processing machinery (*Dicer, Drosha, DGCR8 and p68*) in tumours suggesting that the deregulation of miRNA expression may result from increased miRNA biogenesis. Target gene prediction analysis of the altered miRNAs indicated that genes *RAS, HMGA2* and *PLAG1*, may be regulated by these miRNAs. Significantly, we show that miR-144 and miR-375 can potentially regulate the expression of *PLAG1*.

Conclusions:

This is the first study to examine changes in the miRNA milieu in pleomorphic adenoma, the most common salivary gland tumour. Findings indicate that alterations in miRNA expression in response to changes in miRNA processing could be a key event in the development of these tumours.



PAPILLARY CARCINOMA IN A THYROGLOSSAL DUCT REMNANT

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Purpose:

To report 3 cases of papillary thyroglossal duct carcinoma (TDCa), and to discuss the diagnostic and therapeutic methods. Study design: Retrospective study.

Methodology:

We studied the clinical, pathological details, tre atment and outcome data on 3 patients treated at our institution for a papillary TDCa carcinoma and compared the results with the published cases.

Results:

FNA and frozen section exam was performed in 2 patients. Following the Sistrunk operation(SO), limited thyroidectomy were performed on patient 1 and 2, due to benign lesion, neck dissection were performed on patient 2 and 3, due to regional lymphadenopathy. The diagnosis of papillary TDCa was confirmed in all caases. Lymph nodes metastases were identified in 2 patients. All patients were treated with levothyroxine therapy. After a median follow-up of 47 months, all patients are alive without recurrence.

Conclusion:

Papillary TDCa is a rare malignancy with excellent prognosis. Pre-operative FNA and intra-operative frozen section exam are the most useful methods of confirming the diagnosis. Resection of the thyroglossal duct carcinoma by the Sistrunk operation is an adequate surgical approach. Further thyroidectomy should be limited to one either lobe or pyramidal lobe in high risk patients. Total thyroidectomy is recommended only when there is clinical evidence of multifocal malignancy in thyroid gland. Postoperative hormone suppression is advocated

Key words:

Thyroglossal duct remnant; Papillary carcinoma; thyroidectomy; Therapy.



INCIDENCE OF INADVENTENT PARATHYROIDECTOMY DURING PRIMARY UNILATERAL THYROID SURGERY

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Purpose:

To evaluate the risk of inadvertent parathyroidectomy(IPE) during uni lateral thyroid surgery.

Methodology:

This was a retrospective study of 1103 surgical patients who had undergone unilateral thyroid surgery for benign and malignant thyroid diseases from 2004-2007. Clinical and Pathological data were collected. The risk factors were compared between IPE and no IPE groups in benign cases, malignant cases separately.

Results:

No hypocalcaemia had been observed after surgery in all 1103 cases, including 127 (11.5%) cases with IPE. IPE had been detected in 4.8 percent of benign cases and in 22.5 percent of malignant cases. In benign cases, risk factors for IPE is unilateral total thyroid lobectomy .(P<0.01, RR=5.03). In malignant cases, level VI lymphadenectomy(LNDVI) is the only risk factor for IPE (P=0.02, Risk Rate=11.90). There was no statistically significant difference between the IPE and no IPE groups regarding gender, the histological diagnosis of thyroid disease, or the presence of bleeding or cysts degeneration in the thyroid.

Conclusion:

LNDVI is a strong risk factor for IPE in both benign and malignant cases of primary unilateral thyroid surgery. The indication of LNDVI should be handled rigorously. Total thyroid lobectomy is a risk factor for IPE in benign cases of primary unilateral thyroid surgery.

Key words:

Thyroid; Parathyroidectomy; level VI lymphadenect omy, total thyroid lobectomy.



PREDICTIVE FACTORS FOR LEVEL VI LYMPH NODE METASTASIS IN PAPILLARY THYROID MICROCARCINOMA

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Purpose:

To determine the predictive factors for level VI lymph node(LN) metastasis in thyroid papillary microcarcinoma (PTMC).

Methodology:

We reviewed 86 primarily treated lateral cN0 patients between November 2005 and January 2007 for PTMC by thyroidectomy and elective LN dissection in level VI without comprehensive lateral neck dissection. There were 71 women and 15 men whose age between 23 and 63. The following criteria were used to study the predictive value of level VI LN metastasis: sex, age, multifocality of the tumor, thyroid capsular invasion (TCI), tumor size, incidental finding(incidental finding during benign thyroid operation) and enlarged lymph node.

Results:

In 40 of 86 (46.5%) patients, level VI LN metastasis was found. With use of univariate and multivariate analysis, TCI and tumor size (≥5 mm) were independent correlates of level VI LN metastasis. Sex, age(≥45), multifocality, incidental finding and enlarged lymph node in level VI were not associated with level VI LN metastasis and did not significantly influence the predictive value of these variables.

Conclusions:

We found a significant association among TCI, tumor size (≥5 mm) and level VI LN metastasis in patients with PTMC. A elective neck dissection in level VI should be considered particularly in patients with TCI and a greater than 5 mm tumor

Key Words:

Papillary thyroid carcinoma, microcarcinoma, level VI, lymph node metastasis.



ASSESSMENT OF COMMUNICATION AND SWALLOWING POST LARYNGECTOMY: A REMOTE TELEREHABILITATION TRIAL

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Purpose:

Accessing speech pathology services post discharge can be difficult for some patients post laryngectomy due to distance or lack of available specialist services. Pilot research by Ward et al (2007) reported the validity of conducting communication and swallowing assessments of patients post laryngectomy via a purpose built videoconferencing system. The current study represents Phase II of this research, in which issues and problems with the pilot system have been addressed and a real life distance clinical trial has been undertaken.

Methodology:

Ten (10) laryngectomy patients were assessed using a purpose built video conferencing system incorporating (at the patients end) a free standing, self focusing camera. For this remote trial, videoconferencing between the clinician and the patient took place over a distance of 1700km. As per the Ward et al (2007) study, swallow, stoma and communication status were assessed simultaneously by both the online clinician and a second clinician situated in the room with the patient, to determine system reliability. A satisfaction questionnaire was also completed.

Results:

High agreement was observed between the two raters. The free standing USB camera provided good quality images of the stoma and voice prosthesis. The remote trial revealed occasional difficulties with audio delays and image distortion. Patient satisfaction with the system was good.

Conclusions:

The speech and swallowing status of laryngectomy patients can be evaluated using a purpose built Internet-based telerehabilitation system. A free standing USB camera is necessary to enable adequate vision of the stoma and voice prosthesis. Slight audio delays and occasional image quality disruption are to be expected due to internet connection issues, however these are manageable.

Ward et al. 2007. Assessment of communication and swallowing function post laryngectomy: a telerehabilitation trial. Journal of Telemedicine and Telecare, 13, 3, S3:88 – S3:91.



CIRCULATING TUMOUR CELLS IN HNSCC. IN-VITRO EXPRESSION AND IN-VIVO LONG TERM OUTCOME

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Purpose:

Circulating Tumour Cells (CTCs) are recognised in many solid tumours including Head and Neck Squamous Cell Carcinoma (HNSCC). The potential to identify these cells may provide clinically relevant information relating to tumours with an aggressive phenotype and the propensity to metastasise. Despite this their clinical significance has not been fully elucidated. This study was designed to identify the presence of CTCs in patients with advanced stage HNSCC, to assess the relevance of CTCs expressing different antigens and ascertain the clinical relevance of CTCs in HNSCC.

Methodology:

In-vitro cell culture was used to assess the expression of tumour associated antigens in HNSCC cells. Magnetic cell separation technique was employed to separate tumour cells from plasma. PCR confirmed the presence of CTCs antigen expression. 16 patients with HNSCC were electively enrolled in the study and CTCs expressing tumour related antigens was assessed. Long term follow up from this cohort is now available.

Results:

In-vitro cell culture confirmed the presence of cells expressing tumour related antigens. Using a magnetic cell separation technique and PCR CTCs could be identified at low concentrations in plasma. CTCs were commonly found in patients with HNSCC. CTCs in this patient group do not correlate with outcome when followed up for a prolonged period of time.

Conclusions:

CTCs do not correlate with clinical outcome in this cohort of patients.



AUSTRALIAN & NEW ZEALAND HEAD AND NECK SOCIETY 11TH ANNUAL SCIENTIFIC MEETING



POTENTIAL SUBJECTS INCLUDE:

- research in practice (particularly in relation to tumour microenvironment)
- updates on emerging technologies and their current application
- current research relating to molecular responses of tissues to ionizing radiation, chemotherapy and biological agents to increase control of tumours
- latest integration of systemic agents in the management of head and neck patients
- optimal balances in management tools for patients best outcomes
- functional rehabilitation
- feeding the head and neck patient
- post-operative care
- rural head and neck cancer care co-ordinationmoving forward
- palliative and supportive care including complementary therapies
- updates and debate on the best management of dental issues including osteoradionecrosis
- skin cancers of the head and neck
- future direction of functional imaging

CALL FOR ABSTRACTS due Friday 28 November 2008

innovation and integration

KEYNOTE SPEAKERS CONFIRMED

Professor Vincent Gregoire Catholic University of Louvain, Brussels, Belgium

Dr Ehab Hanna MD Anderson Cancer Centre, Houston, Texas, USA

Dr Moni Abraham Kuriakose Amrita Institute of Medical Sciences, Kochi, India

WHO SHOULD ATTEND

Surgeons, Medical Oncologists, Radiation Oncologists, Nurses, Speech Pathologists, Radiographers, Dieticians, Radiation Therapists, Pharmacists, Registrars in any of the above specialities and all allied health professionals with an interest in head and neck cancer.



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