Australian and New Zealand Head & Neck Cancer Society Annual Scientific Meeting

and the

International Federation of Head and Neck Oncologic Societies 2012 World Tour

24 – 26 October 2012 Boulevard Level Brisbane Convention & Exhibition Centre on Grey Street South Bank, Brisbane, Australia

www.ifhnosbrisbane2012.org

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Final Program

AUSTRALIAN AND NEW ZEALAND HEAD & NECK CANCER SOCIETY



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* Please note changes in Product Information.

References: 1. Erbitux Product Information. Date of last amendment: 1 September 2011 2. Gregoire, V. et al, On behalf of the EHNS–ESMO–ESTRO Guidelines Working Group. Ann of Oncol. 2010; 45 (Suppl 5): v184–v186. 3. National Comprehensive Cancer Network Clinical Guidelines in Oncology (Head and Neck Cancers), V.1.2012, www.nccn.org.

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24 - 26 October 2012

Brisbane, Australia

Brisbane Convention & Exhibition Centre

Welcome

Dear Colleagues

On behalf of the Local Organising Committee, it is our pleasure to welcome you to the 14th Annual Scientific Meeting of the ANZHNCS combined with the International Federation of Head and Neck Oncologic Societies (IFHNOS) 2012 World Tour.

We are fortunate this year to join together with IFHNOS to present 'Current Concepts in Head & Neck Surgery and Oncology' at our Annual Scientific Meeting. The faculty for this program will be led by Professors Jatin Shah, Chief of the Head and Neck Surgery Service and Ashok Shaha, Attending Surgeon at Memorial Sloan-Kettering Cancer Center, New York. Joining them are Professor Daniel Fliss from Tel Aviv, Professor Piero Nicolai from Brescia, Professor Brian O'Sullivan from Toronto and Professor Jan Vermorken from Belgium.

IFHNOS presents a global continuing medical education program biennially. The faculty are all leaders in their fields and will present on topics which include Oral Cancer, Thyroid Cancer, Multidisciplinary Therapy, Organ Preservation, Reconstructive Surgery, Operative Techniques in Head and Neck Surgery and Skull Base Surgery.

We are also pleased to have the participation of Professor Ian Frazer, CEO and Director of Research at the newly established Translational Research Institute based on the campus of the Princess Alexandra Hospital, Ms Roganie Govender, Consultant Speech and Language Therapist, University College London Hospital, London, and Dr Robert Haddad, Chief of the Head and Neck Oncology Program and a member of the Department of Adult Oncology, Dana Farber Cancer Institute, Boston, Massachusetts.

The support provided by sponsors and exhibitors for the Meeting is integral to its success and we acknowledge our Platinum Sponsor: Merck Serono, Gold Sponsor: Medtronic, Silver Sponsor: Olympus and Bronze Sponsors: Elekta, Medical & Optical and Synthes. We would also like to thank all the companies participating in the industry exhibition.

Delegates are encouraged to meet with company representatives in the break and to also view the posters on display in the exhibition area.

We hope you enjoy your time at the 14th ANZHNCS ASM and IFHNOS 2012 World Tour in Brisbane.

Yours sincerely



The Ca

Associate Professor Ben Panizza FRACS President ANZHNCS



Associate Professor Ben Wallwork FRACS Convener ANZHNCS ASM and IFHNOS 2012 World Tour



Australian and New Zealand Head & Neck Cancer Society (ANZHNCS)

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 cancer 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 & Neck Cancer 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.

Membership

OLYMPUS Your Vision, Our Future

Membership of the Australian and New Zealand Head & Neck Cancer Society gives multiple opportunities to keep up with the latest clinical and research developments in the field of head and neck oncology as well as access to local and international leading oncological surgeons for specific clinical case questions and issues. Members are eligible for reduced rates to the Annual Scientific Meeting. For further information about the Society and/or becoming a member visit www.anzhncs.org

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 Watanabe, A. Tsujie, H. Taniguchi, M. Hosokawa, M. Fujita, M. Sasaki, S. (2006). Laryngoscopic Detection of Pharyngeal Carcinoma in Situ with Narrowband Imaging. The Laryngoscope, VOL116(4), 650-654.
 OLYMPUS AUSTRALIA 2012 NASOENDOSCOPY LARYNGOSCOPY STROBOSCOPY EFES

Brisbane Convention & Exhibition Centre Brisbane, Australia

Committee, Faculty and Speakers

2012 Organising Committee

Convener	Associate Professor Ben Wallwork FRACS, Surgeon, Brisbane
Scientific Conveners	Dr Matthew Foote FRANZCR, Radiation Oncologist, Brisbane Associate Professor Suren Krishnan FRACS, Surgeon, Adelaide Ms Nadine Lawson, BAppSci, Speech Pathologist, Brisbane Associate Professor Ben Wallwork FRACS, Surgeon, Brisbane
Committee	Dr Martin Batstone FRACDS (OMS), FRCS (OMFS), Surgeon, Brisbane Associate Professor Ben Panizza FRACS, Surgeon, Brisbane Associate Professor Sandro Porceddu FRANZCR, Radiation Oncologist, Brisbane Dr Daniel Rowe FRACS, Surgeon, Brisbane

ANZHNCS Executive Committee

President	Associate Professor Ben Panizza FRACS, Surgeon, Brisbane
Vice President	Dr Janelle Heywood FRANZCR, Radiation Oncologist, Perth
Secretary	Mr Kerwin Shannon FRACS, Surgeon, Sydney
Treasurer	Dr Bob Smee FRANZCR, Radiation Oncologist, Sydney
Executive	Dr Martin Batstone FRACDS (OMS), FRCS (OMFS), Surgeon, Brisbane Dr Yugesh Caplash FRACS, Surgeon, Adelaide Dr Lyndell Kelly FRANZCR, Radiation Oncologist, Dunedin, New Zealand Associate Professor Bernard Lyons FRACS, Surgeon, Melbourne Dr Julia Maclean PhD, Speech Pathologist, Sydney Mr Guy Rees FRACS, Surgeon, Adelaide Dr David Wiesenfeld MDSc, FDSRCPS, FRACDS (OMS), Surgeon, Melbourne

IFHNOS Travelling Faculty

Professor Jatin Shah, New York, United States of America Professor Ashok Shaha, New York, United States of America Professor Daniel Fliss, Tel Aviv, Israel Professor Piero Nicolai, Brescia, Italy Professor Brian O'Sullivan, Toronto, Canada Professor Jan B. Vermorken, Antwerp, Belgium

Keynote Speakers

Ms Roganie Govender, London, United Kingdom Dr Robert Haddad, Boston, Massachusetts, United States of America

Invited Speaker

Professor Ian Frazer, Brisbane, Australia



Meeting Sponsors and Exhibitors



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Exhibitors

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24 – 26 October 2012 Brisbane Convention & Exhibition Centre Brisbane, Australia

IFHNOS Travelling Faculty



Professor Jatin P. Shah, MD, PhD (Hon), FACS, FRCS (Hon), FDSRCS (Hon), FRACS (Hon)

Professor Jatin Shah is Leader of the Head and Neck Program and holds The Elliott W. Strong Chair in Head and Neck Oncology at Memorial Sloan-Kettering Cancer Center in New York City.

Professor Shah has served as President of The New York Cancer Society, The New York Head and Neck Society, The Society of Head and Neck Surgeons, The North American Skull Base Society, and the International Academy of Oral Oncology. He is Founder and CEO of The International Federation of Head and Neck Oncologic Societies.

Professor Shah has been the recipient of numerous awards from all continents and is an honorary member of several head and neck societies in Europe, Asia, Australia and South America. He serves on the Editorial and Review Boards of 18 scientific journals and has more than 350 peer-reviewed publications, 65 book chapters and 8 books. His textbook of Head and Neck Surgery and Oncology won First Prize from The British Medical Association and The Royal Society of Medicine, and was awarded the George Davey Howells Prize from the University of London for the best published book in otolaryngology in the preceding five years. He is a much sought-after speaker who has delivered 60 named lectures and keynote addresses and over 1,000 scientific presentations in 49 countries. In recognition of his outstanding contributions and world leadership in head and neck surgery, Memorial Sloan-Kettering Cancer Center has established an endowed Chair in his name, the American Head and Neck Society has named an annual symposium in his honor, and the IFHNOS has established an eponymous lecture at its World Congresses.



Professor Ashok R. Shaha, MD, FACS

Professor Ashok Shaha is an Attending Surgeon on the Head and Neck Service at Memorial Sloan-Kettering Cancer Center, Professor of Surgery at Cornell University Medical College, and holds the Jatin Shah Chair in Head and Neck Surgery at MSKCC. Dr Shaha completed his surgical training at M.S. University of Baroda

and at The Tata Memorial Hospital in India. He completed his surgical training at Downstate Medical Center in Brooklyn, New York and a fellowship in head and neck surgery at Memorial Hospital. He joined the Department of Surgery at Downstate Medical Center in 1982 as a Head and Neck Surgeon, rising to the rank of Professor of Surgery in 1992. During this period, he was also Chief of Head and Neck Surgery at King's County, Brooklyn VA Hospital and University Hospital. He joined the full time faculty of MSKCC in 1993.

Dr Shaha has been awarded many honors throughout his career. He has served as President of the New York Head and Neck Society, the American Society for Surgeons of Indian Origin, the Brooklyn Surgical Society, the New York Cancer Society, the New York Surgical Society, the American Head and Neck Society, and the American Association of Endocrine Surgeons. His CV includes more than 500 publications. Dr Shaha has dedicated his professional career to the training of medical students, residents and fellows. He is Chairman of the Advanced Training Council for Head and Neck Surgery and Oncology Fellowships in the USA.



Professor Daniel Fliss, MD

Professor Dan M. Fliss is Chairman of the Division of Otolaryngology Head and Neck Surgery and Maxillofacial Surgery Tel Aviv Sourasky Medical Center and the Faculty of Medicine Tel Aviv University.

He completed his fellowship training at the Department of Head and Neck Surgical Oncology, Mount Sinai Hospital, University of Toronto, Canada. He then studied Microvascular Head and Neck Surgery and Reconstruction at Sunnybrook Health Science Center, University of Toronto, Canada. His final fellowship was in Skull Base Surgery at the Department of Maxillofacial Surgery, Plastic and Reconstructive Surgery, Inselspital, University of Bern, Switzerland.

Professor Fliss served as President of The Israel Society of Otolaryngology Head and Neck Surgery in 2003. He sits on the editorial board of Head and Neck, Skull Base (Section Editor), Otolaryngology-Head and Neck Surgery, European Archives of Otorhinolaryngology, Auris Nasus Larynx, The Journal of Surgical Techniques in Otolaryngology-Head and Neck Surgery, the International Journal of Head and Neck Surgery, the International ORL Bulletin, Orissa Journal of Otolaryngology-Head and Neck Surgery, and Acta Medica Medianae journals. He has been an invited guest lecturer in Australia, Albania, Brazil, Bulgaria, Czech Republic, Croatia, China, Chile, Canada, Denmark, Egypt, France, Germany, Greece, Hong Kong, Holland, India, Italy, Kossovo, Korea, Mexico, Serbia, Switzerland, Spain, Singapore, Turkey, Taiwan, the USA, and Vietnam.

Professor Fliss has authored 160 clinical and scientific articles and published 18 chapters in medical textbooks.



Professor Piero Nicolai, MD

Professor Piero Nicolai, MD is Chairman of the Department of Otorhinolaryngology - Head and Neck Surgery at the University of Brescia (Italy). He received his MD degree at the University of Padua, where he also completed his residency programme in otolaryngology

and subsequently in medical oncology. His clinical and research activities are mainly focused on head and neck oncology and endoscopic sinus and skull base surgery.

Professor Nicolai is an active member of several medical societies: Società Italiana di Otorinolaringologia e Chirurgia Cervico-Facciale, Società Italiana del Basicranio, European Skull Base Society, American Academy of Otolaryngology - Head and Neck Surgery, European Rhinologic Society, European Laryngological Society, American Head and Neck Society, American Rhinologic Society, American Laryngological Association, Cartesian Society, European Academy of Oto-Rhino-Laryngology, Head and Neck Surgery, and Associazione Italiana Oncologia Cervico Cefalica. He is currently serving as Treasurer of the European Academy of Oto-Rhino- Laryngology, Head and Neck Surgery and as Member of the Executive Committee of the European Skull Base Society. In 2009, he was awarded the American Academy of Otolaryngology-Head and Neck Surgery Honor Award in recognition of his volunteer contributions to the Academy and its Foundation.



Professor Nicolai has authored or co-authored 127 papers in peer-reviewed journals as well as 35 book chapters, and was coeditor of a book on *"Imaging in Treatment Planning for Sinonasal Diseases"*. He is a member of the editorial board of four journals: Annals of Otology, Rhinology & Laryngology, Current Opinion in Otolaryngology & Head and Neck Surgery, Head & Neck, and International Journal of Head and Neck Surgery.



Professor Brian O'Sullivan, MD, FRCPC, FRCPI, FFRRCSI (Hon)

Brian O'Sullivan is a Professor in the Department of Radiation Oncology and the Department of Otolaryngology/Head and Neck Surgery at the University of Toronto, Canada. He holds the Bartley- Smith/Wharton Distinguished Chair in

Radiation Oncology in the Department of Radiation Oncology at the Princess Margaret Hospital, University of Toronto. He received his medical degree from the National University of Ireland at University College in Dublin in 1976, and completed internship and general internal medicine at St. Vincent's Hospital in Dublin. Additional postgraduate training includes a fellowship in medical oncology, and a residency and clinical fellowship in radiation oncology, all at Princess Margaret Hospital in Toronto, Canada.

Professor O'Sullivan is the Head and Neck Oncology Program Lead at Princess Margaret Hospital, where he is also Associate Director of the Radiation Medicine Program. He is Chair of the Head and Neck Oncology Committee of the National Cancer Institute of Canada Clinical Trials Group (NCIC CTG). He is the recipient of numerous international awards, and research grants and a frequent invited speaker and visiting professor in many of the world's best academic centres. He has published more than 200 peer reviewed papers relevant to his field in oncology, in excess of 50 book chapters, and has written or edited 6 oncology textbooks. His interests include sarcoma and head and neck cancer, translational research, IMRT delivery and the principles of image guided radiotherapy, chemo-radiotherapy and molecular targeting. He also has long experience in population outcomes research, program quality initiatives, and institutional strategic planning. He has contributed substantially in prognostic factor evaluation and cancer staging issues as the head and neck cancer domain expert on the TNM Committee of the Union for International Cancer Control (UICC) and represents the UICC TNM Committee at the International Agency for Research on Cancer (IARC) of the World Health Organization (WHO). He also represents the UICC as head and neck cancer liaison to the American Joint Committee on Cancer (AJCC).



Professor Jan B. Vermorken, MD, PhD

Professor Jan Vermorken started his medical training in 1961. He graduated in 1970 from the University of Amsterdam, the Netherlands, did his internal medicine training at the University Hospital, Vrije Universiteit in Amsterdam, and became a board-certified specialist in

internal medicine in 1975. Since that time he has worked in the field of Medical Oncology and was officially registered as a Medical Oncologist in the Netherlands in 1992. He received his PhD in Medical Sciences in 1986 from the Vrije Universiteit in Amsterdam. Since 1997, he is Professor of Oncology at the University of Antwerp, and head of the Department of Medical Oncology at the Antwerp University Hospital. His main field of interest is in head and neck oncology and gynecologic oncology. His main research areas concern early clinical and pharmacological studies with new drugs, studies on the interaction of chemotherapy and radiation therapy, HPV in various malignancies, and immunological approaches. He devotes a significant amount of time to teaching, professional training, and continuing medical education.

He was member of scientific board of the Dutch Cancer Society from 1988 to 1993, was chairman of the Dutch Society of Oncology from 1989 to 1997 (the moment he went to Antwerp) and chairman of the Belgian Association of Cancer Research in 2003. Since 1985 he is member of the EORTC Head and Neck Cancer Group, served as chairman of its Subcommittee for Chemotherapy (1985-1991), was secretary of the group from 1995 to 2006 and chairs the group as of April 2006. Professor Vermorken chaired the ESMO National Representatives Committee from 1991 to 1996 and the ESMO Educational Committee from 1996 to 2002.

Professor Vermorken is member of various scientific societies, member of six editorial boards of International journals, reviewer of 13 cancer journals and author or co-author of more than 400 publications in international journals. He received the ESMO award in 2007 for his contribution to the development of medical oncology. As of January 1, 2009 he is Editor-in-Chief of Annals of Oncology, the main European Medical Oncology Journal.

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Keynote Speakers



Ms Roganie Govender

Ms Roganie is a consultant speech and language therapist and co-clinical lead for the Head and Neck specialist SLT team at University College London Hospital, London, UK. She trained in South Africa where she obtained a dual qualification in Speech

Pathology and Audiology in 1993. In 1998 she obtained a Masters degree in Communication Pathology.

Roganie has worked within the field of ENT/Head and Neck both in South Africa and in the UK. Her experience in South Africa includes working at The Chris Hani Baragwanath Hospital in Soweto and the Johannesburg General Hospital. She has also worked in different parts of the UK including Newcastle, Birmingham and Cambridge. She worked at The Royal Free Hospital in London from 2000 and joined the Head and Neck unit at UCLH since its inception in June 2005. During the course of her career she has developed specialist skills in working with a range of patients seen within the ENT/Head and Neck, maxillofacial and radiotherapy and oncology specialities. She has completed advanced training in the management of laryngectomy and surgical voice restoration in the UK, Amsterdam and Indianapolis, and attended an observership programme at the Memorial Sloan Kettering Cancer Centre in New York.

Roganie served as the chairperson for the Speech & Language Therapy Special Interest Group (SIG) in Head and Neck cancer for the south of England from October 2004 to January 2008. During this time she championed the idea of using the SIG as a forum to foster multicentre audit and research amongst speech and language therapists working in the specialty. Roganie's current research interests include functional outcomes for swallowing and communication following head and neck cancer. She is currently principal investigator on a multicentre project investigating swallowing after total laryngectomy.

Roganie is involved in teaching and training of speech and language therapists at undergraduate and postgraduate level. She is also part of an expert panel engaged in the development and regular updates of clinical guidelines on behalf of The Royal College of Speech and Language Therapists (RCSLT). While she enjoys all aspects of her professional work, Roganie considers her first commitment to be face to face patient care and was honoured to receive the Macmillan Action for London 2009 patient nominated award.



Dr Robert Haddad

Dr Robert I. Haddad, MD, is Associate Professor of Medicine, Harvard Medical School, and Boston, Massachusetts. He is the Chief of Head and Neck Oncology Program, and a member of the Department of Adult Oncology, Dana-Farber Cancer

Institute, Boston, Massachusetts.

Dr Haddad received his medical degree from Saint Joseph University, French Faculty of Medicine, and served as intern and resident at St. Luke's Roosevelt Hospital Center, New York, New York. He served a fellowship in hematology/oncology at Greenebaum Cancer Center, University of Maryland, Baltimore, Maryland. Dr Haddad is a member of several professional societies, including the American Society of Clinical Oncology, American Association for Cancer Research, Cancer and Leukemia Group B, and the American Society for Therapeutic Radiology and Oncology.

Dr Haddad's current research activity involves the use of intensive and novel sequential and concurrent chemoradiotherapy regimens for patients with locally advanced head and neck cancer. Dr Haddad lectures extensively on head and neck cancer, both on the regional, national, and international level. He has authored more than 100 publication related to Head and Neck cancer.

Proudly supported by



Invited Speaker



Professor Ian Frazer

Professor lan Frazer was trained as a renal physician and clinical immunologist in Edinburgh Scotland. Dr Frazer's research group studies the immunology of papillomavirus associated cancers. In 1991, along with Chinese colleague, Dr Jian Zhou, he developed

the virus-like particle technology which has become the basis of vaccines to prevent cervical cancer. Dr Frazer is CEO and Director of Research of the newly created Translational Research Institute in Brisbane, Australia. He is the current chair of the Scientific Advisory Council of the International Agency for Research on Cancer.



General Information

Registration Information

Full registration includes all scientific sessions, final program, lunch, morning and afternoon tea on nominated days, entry to the industry exhibition, Welcome Reception and Meeting Dinner.

One day registration includes all scientific sessions, final program, lunch, morning and afternoon tea on nominated day/s and entry to the industry exhibition. Tickets to the Welcome Reception and Meeting Dinner are an additional cost.

Registration Desk

The Registration Desk is located in the Boulevard Auditorium Foyer, Boulevard Level, Brisbane Convention & Exhibition Centre on Grey Street.

Opening Hours:

 Wednesday 24 October 2012
 7.30am - 5.00pm

 Thursday 25 October 2012
 7.30am - 5.00pm

 Friday 26 October 2012
 7.30am - 4.00pm

Official Functions

Welcome Reception

Wednesday 24 October 2012 Boulevard Auditorium Foyer, Boulevard Level Brisbane Convention & Exhibition Centre on Grey Street 6.35pm – 7.35pm Cost: Included for full registration, bookings essential

Additional tickets \$41.00 inc GST

Tickets essential. If you have a full registration and would like to attend or if you would like to purchase an additional ticket, please enquire with the staff at the registration desk regarding availability.

Meeting Dinner

Thursday 25 October 2012 Grand Ballroom Stamford Plaza Brisbane Corner of Margaret and Edward Streets, Brisbane 7.00pm – 10.30pm Cost: Included for full registration, bookings essential Additional tickets \$130.00 inc GST

Tickets essential. If you have a full registration and would like to attend or if you would like to purchase an additional ticket, please enquire with the staff at the registration desk regarding availability.

(Coaches depart 6.45pm from Rydges South Bank and Riverside Hotel South Bank. Please meet in your hotel foyer. Coaches return to hotels departing the Stamford Plaza at approximately 10.30pm.)

Dress

Scientific Sessions: Smart Casual Welcome Reception: Smart Casual Meeting Dinner: Lounge Suit/Cocktail Dress

Royal Australasian College of Surgeons CPD Points

This educational activity has been approved in the College's CPD Program. Fellows who participate can claim one point per hour (maximum 22 points) in Category 4: Maintenance of Clinical Knowledge and Skills towards 2012 CPD totals.

Certificate of Attendance

A certificate of attendance is included with your meeting materials. Please see staff at the registration desk if you have not received your copy.

Intention to Photograph

Delegates are advised that photographs may be taken during the Meeting and reproduced.

Business Meetings

ANZHNCS Research Foundation Meeting

(Board Members only) Thursday 25 October 2012 12.30pm – 1.30pm, Arbour Boardroom, Arbour Level

ANZHNCS Annual General Meeting

(Members only) Friday 26 October 2012 12.30pm, Boulevard Auditorium

Dietary Requirements

Please note that the venue, Brisbane Convention & Exhibition Centre, is responsible for all catering at the meeting. You will need to contact the venue directly for all special dietary requirements during the event. RACS takes no responsibility for ensuring the venue is aware of your dietary requirements or that these requirements are met. RACS refutes any and all liability for any failure to adequately provide your special dietary requirements or any consequential damage resulting from such failure.

Brisbane Convention & Exhibition Centre

Brisbane, Australia

Exhibition Floor Plan

Boulevard Auditorium Foyer

EXHIBITOR	BOOTH
Aurora Bioscience	13
Elekta	20
GE Healthcare	8
GlaxoSmithKline	5
Karl Storz Endoscopy	21
LMA PacMed Pty Ltd	15
LMT Surgical	7
MD Solutions Australasia Pty Ltd	22
Medical & Optical	10
Medtronic	14 & 16
Merck Serono Australia	24 & 25
Olympus	23
Synthes	9
Varian Medical Systems	6



Scientific Program



Brisbane Convention & Exhibition Centre

Brisbane, Australia

Scientific Program

Wednesday 24 October 2012

- 7.30am Registration and Arrival Tea/Coffee Boulevard Auditorium Foyer
- 8.00am Official Opening Meeting Convener: Ben Wallwork (Brisbane) Boulevard Auditorium

Official Opening: Her Excellency Ms Penelope Wensley AC, Governor of Queensland

- 8.15am Plenary IFHNOS Session 1
 9.30am Oral Cancer Moderators: Ashok Shaha (New York, USA) and Martin Batstone (Brisbane) Boulevard Auditorium
- 8.15am Oral cancer Jatin Shah (New York, USA)

8.45am Panel discussion

Panellists: Daniel Fliss (Tel Aviv, Israel), Brian O'Sullivan (Toronto, Canada), Richard Lewis (Nedlands) and Jonathan Clark (Sydney)

- 9.30am Morning Tea with the Industry Boulevard Auditorium Foyer
- 10.00am Plenary IFHNOS Session 2
 12.30pm Thyroid Cancer Moderators: Piero Nicolai (Brescia, Italy) and Scott Coman (Brisbane) Boulevard Auditorium
- 10.00am Treatment of primary cancers Jatin Shah (New York, USA)
- 10.30am Treatment of the neck Ashok Shaha (New York, USA)
- 11.00am Panel discussion

Panellists: Brian O'Sullivan (Toronto, Canada), Jan Vermorken (Antwerp, Belgium), John Chaplin (Auckland) and Roger Allison (Brisbane)

- 12.30pm Lunch with the Industry Boulevard Auditorium Foyer
- 1.30pm Plenary IFHNOS Session 3
 4.00pm Multidisciplinary Therapy Moderators: Jatin Shah (New York, USA) and June Corry (Melbourne) Boulevard Auditorium
- 1.30pm Chemotherapy Jan Vermorken (Antwerp, Belgium)



2.00pm	Radiation therapy Brian O'Sullivan (Toronto, Canada)
2.30pm	Complications from radiation therapy Daniel Fliss (Tel Aviv, Israel)
3.00pm	Panel discussion
	Panellists: Ashok Shaha (New York, USA), Julia Maclean (Sydney) and Fiona Rezannah (Melbourne)
4.00pm	Afternoon Tea with the Industry Boulevard Auditorium Foyer
4.20pm – 6.30pm	Plenary ANZHNCS Session 4 ANZHNCS Research Foundation Session Moderator: Ben Panizza (Brisbane) Boulevard Auditorium
4.20pm	Medal of Excellence award Presented by Ben Panizza (Brisbane)
4.25pm	Chris O'Brien Oration Jatin Shah (New York, USA)
4.55pm	Immunotherapy for HPV associated squamous cancers Ian Frazer (Brisbane)
5.20pm	Introduction to ANZHNCS Research Foundation session Gary Morgan (Sydney)
5.25pm	Targeting EGFR to improve quality of survival in locally advanced and recurrent/metastatic SCCHN Robert Haddad (Boston, USA)
5.55pm	Sentinel node biopsy in high risk non melanoma skin cancer Douglas Shaw (Sydney)
6.07pm	Early acute dysphagia during radiation and chemoradiation treatment: implications for acute care services Elizabeth Ward (Brisbane)
6.19pm	When is a patient with head and neck carcinoma cured: conditional probability of survival Robert Smee (Sydney)
6.35pm – 7.35pm	Welcome Reception Boulevard Auditorium Foyer <i>Tickets essential</i>

Thursday 25 October 2012

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7.30am	Registration Open and Arrival Tea/Coffee Boulevard Auditorium Foyer
8.00am – 10.00am	Plenary ANZHNCS Session 5 Collaborative Care – Current Concepts in Multidisciplinary Management Moderator: Nadine Lawson (Brisbane) Boulevard Auditorium
8.00am	HPV in SCCHN: a changing treatment paradigm Robert Haddad (Boston, USA)
8.20am	Current concepts in MDT management: what can allied health professionals (AHP's) contribute to treatment decision-making? Roganie Govender (London, UK)
8.50am	What are the voice outcomes following endoscopic carbon dioxide (CO ₂) laser excision for early glottic carcinoma? A descriptive study using high-speed videolaryngoscopy Danielle Stone (Sydney)
9.00am	Dysphagia is a prevalent and under recognized complication of head and neck radiotherapy Julia Maclean (Sydney)
9.10am	Impact of neck dissection on scapular muscle function: a case controlled EMG study Aoife McGarvey (Newcastle)
9.20am	The caregivers' perspective on the impact of dysphagia following head and neck cancer Elizabeth Ward (Brisbane)
9.30am	The population benefit of radiotherapy for head and neck malignancies: local control and survival estimates for larynx cancer and oral cancer Timothy Hanna (Sydney)
9.40am	Adaptive radiotherapy for virally mediated head and neck cancer Elizabeth Brown (Brisbane)
9.50am	Questions
10.00am	Morning Tea with the Industry Boulevard Auditorium Foyer
10.30am – 12.30pm	Plenary IFHNOS Session 6 Organ Preservation Moderators: Ashok Shaha (New York, USA) and Sandro Porceddu (Brisbane) Boulevard Auditorium
10.30am	Endoscopic surgery for laryngeal function preservation Piero Nicolai (Brescia, Italy)
10.50am	Radiation therapy for laryngeal function preservation Brian O'Sullivan (Toronto, Canada)
11.10am	Chemotherapy for laryngeal function preservation Jan Vermorken (Antwerp, Belgium)
11.30am	Panel discussion
	Panellists: Jatin Shah (New York, USA), June Corry (Melbourne) and Guy Rees (Adelaide)



12.30pm	Lunch with the Industry Boulevard Auditorium Foyer
12.30pm – 1.30pm	ANZHNCS Research Foundation Meeting (Board Members Only) Arbour Boardroom, Arbour Level
1.30pm – 3.00pm	Concurrent IFHNOS Session 7a Stump the Faculty Moderators: Ashok Shaha (New York, USA) and Bernard Lyons (Melbourne) Boulevard Auditorium
1.30pm	Panellists: Jatin Shah (New York, USA), Daniel Fliss (Tel Aviv, Israel), Piero Nicolai (Brescia, Italy), Jan Vermorken (Antwerp, Belgium), Brian O'Sullivan (Toronto, Canada), Swee Tan (Wellington) and Matthew Foote (Brisbane)
1.30pm – 3.00pm	Concurrent Allied Health Session 7b Extending our Knowledge of Treatment: Impacts and Outcomes Moderators: Rachelle Robinson (Sydney) and Aoife McGarvey (Newcastle) Meeting Room B1
1.30pm	Development and preliminary validation of a patient-reported outcome measure for swallowing after total laryngectomy (SOAL questionnaire) Roganie Govender (London, UK)
1.45pm	Oesophageal dysmotility in laryngectomy patients: an unrecognized association? Julia Maclean (Sydney)
1.55pm	Development and implementation of a local consensus statement for gastrostomy tube insertion in head and neck cancer patients Fiona Rezannah (Melbourne)
2.05pm	Swallowing functional outcomes of radiotherapy (+/- Chemotherapy): another piece to the puzzle Sophie Chandler (Sydney)
2.15pm	Tongue and floor of mouth cancer surgery: 5 year file audit of treatment, rehabilitation and functional outcomes Katrina Blyth (Sydney)
2.25pm	Dysphagia in head and neck cancer: examining the impact from the patients' perspective Rebecca Nund (Brisbane)
2.35pm	Evaluation of a speech pathology telehealth service for head and neck cancer patient support Clare Burns (Brisbane)
2.45pm	Dysphagia and nutritional management practices: survey from Australian and New Zealand multidisciplinary teams Elizabeth Ward (Brisbane)
3.00pm	Afternoon Tea with the Industry Boulevard Auditorium Foyer
3.20pm – 4.30pm	Plenary IFHNOS Session 8 Reconstructive Surgery Moderators: Daniel Fliss (Tel Aviv, Israel) and Daniel Rowe (Brisbane) Boulevard Auditorium
3.20pm	Reconstructive techniques Jatin Shah (New York, USA)

Brisbane Convention & Exhibition Centre

Brisbane, Australia

Thursday 25 October 2012 (cont'd)

3.50pm Panel discussion

Panellists: Daniel Fliss (Tel Aviv, Israel), Piero Nicolai (Brescia, Italy), Swee Tan (Wellington) and Martin Batstone (Brisbane)

4.30pm - Plenary IFHNOS Session 9

5.30pm Operative Techniques in Head and Neck Surgery Moderators: Jatin Shah (New York, USA), Ashok Shaha (New York, USA), Daniel Fliss (Tel Aviv, Israel) and Piero Nicolai (Brescia, Italy) Boulevard Auditorium

Video clips for discussion:

- 1) Excision of the deep lobe parotid tumor through the stylo-hyoid window Ashok Shaha (New York, USA)
- 2) Total thyroidectomy with central compartment node dissection Jatin Shah (New York, USA)
- 3) Supraomohyoid neck dissection Jatin Shah (New York, USA)
- 4) Endoscopic supraglottic partial laryngectomy Piero Nicolai (Brescia, Italy)
- 5) Endoscopic resection of juvenile angiofibroma Piero Nicolai (Brescia, Italy)

7.00pm Meeting Dinner

Grand Ballroom Stamford Plaza Brisbane Corner of Margaret & Edward Streets, Brisbane Tickets essential. Please refer to page 11 for coach transfer information.

Friday 26 October 2012

7.30am	Registration Open and Arrival Tea/Coffee Boulevard Auditorium Foyer
8.00am – 10.00am	Concurrent IFHNOS Session 10a Skull Base Surgery/Parapharyngeal Moderators: Piero Nicolai (Brescia, Italy) and Robert Smee (Sydney) Boulevard Auditorium
8.00am	Skull base surgery/parapharyngeal Daniel Fliss (Tel Aviv, Israel) and Jatin Shah (New York, USA)
8.30am	Panel discussion
	Panellists: Jatin Shah (New York, USA), Brian O'Sullivan (Toronto, Canada) and Ben Panizza (Brisbane)
8.00am – 10.00am	Concurrent Allied Health Session 10b Holistic Management: Enhancing our Knowledge and Roles Moderators: Jodie Nixon (Brisbane) and Kelli Hancock (Brisbane) Meeting Room B1
8.00am	The predictors of adverse pain outcome in head and neck cancer patients Chi Fai Tsang (Sydney)
8.10am	ALOHA: a pilot study of the assessment of lymphoedema of head and neck Amanda Purcell (Brisbane)
8.20am	l am more than my cancer - my story matters Rowanne Wright (Brisbane)
8.30am	It does get better – improving information for survivorship from treatment for head and neck cancer Alana Fraser (Brisbane)



8.40am	Continuing conversations in the community: improving access to specialist care in the community for patients post laryngectomy Felicity Megee (Melbourne)
8.50am	Head and neck cancer mentoring program – supporting allied health staff in Queensland Alana Fraser (Brisbane)
9.00am	Measuring outcomes: exploring the way to consistency Roganie Govender (London, UK) and Nadine Lawson (Brisbane)
10.00am	Morning Tea with the Industry Boulevard Auditorium Foyer
10.30am – 12.30pm	Plenary ANZHNCS Session 11 Advances and Challenges Treating Cutaneous Malignancy Moderator: Lyndell Kelly (Dunedin) Boulevard Auditorium
10.30am	Management options for superficial recurrent melanoma on the head and neck Mark Smithers (Brisbane)
10.45am	Advances in the management of locally advanced cutaneous SCC of the head and neck Sandro Porceddu (Brisbane)
11.00am	Intratumoural heterogeneity as a driver of drug resistance and its implications for personalised therapies in cutaneous malignancies Nicholas Saunders (Brisbane)
11.15am	Question/discussion time
11.25am	The genomic expression of cutaneous squamous cell carcinoma of the head and neck with perineural invasion Timothy Warren (Brisbane)
11.35am	Quality of life in metastatic cutaneous squamous cell carcinoma of the head and neck – the Westmead Hospital experience Allen Yu-Yu Wang (Sydney)
11.45am	A prospective epidemiological study on intrabony lesions of the jaws in Queensland Nigel Johnson (Brisbane)
11.55am	Oral cavity and oropharyngeal cancers in non smokers - Princess Alexandra Hospital 2001 – 2011 Christopher Perry (Brisbane)
12.05pm	Surgery or chemoradiotherapy for oral cavity SCC? : a comparative study of disease and functional outcomes Sinclair Gore (Sydney)
12.15pm	Fasciocutaneous and osteocutaneous free tissue transfer outcome optimization utilizing intraoprative fluorescent angiography in head and neck reconstruction J Marshall Green (Maryland, USA)
12.30pm	ANZHNCS Annual General Meeting (Members only) Boulevard Auditorium
12.30pm	Lunch with the Industry Boulevard Auditorium Foyer

Friday 26 October 2012 (cont'd)

1.30pm – 3.30pm	Plenary ANZHNCS Session 12 New Horizons and Targeted Therapy in the Next Decade Moderator: David Wiesenfeld (Melbourne) Boulevard Auditorium
1.30pm	Controlling cellular trafficking to improve response to monoclonal antibody therapies in epithelial cancer Fiona Simpson (Brisbane)
1.45pm	Targeting Protein Kinase C as cancer therapy Glen Boyle (Brisbane)
2.00pm	A novel adoptive immunotherapy approach for the treatment of epstein-barr virus-associated nasopharyngeal carcinoma Corey Smith (Brisbane)
2.15pm	Oncologic results after trans oral robotic surgery in the first proctor-level robotic head and neck center in Germany Balazs B Lorincz (Eppendorf, Germany)
2.25pm	The predictive value of 18F-FDG PET-CT scan performed in the third week of chemoradiation for locally advanced head and neck squamous cell cancer Allan Fowler (Sydney)
2.35pm	Australian and New Zealand survey assessing the attitudes of head and neck clinicians toward the use of PET in the re-staging and management of HNSCC following (chemo)radiotherapy Yang Li (Brisbane)
2.45pm	Predictors of locoregional relapse, distant relapse and overall survival in locoregionally advanced oropharyngeal cancer in the era of HPV Penny Mackenzie (Brisbane)
2.55pm	Human papillomavirus status of oropharyngeal cancer: a predictor of tolerance to radiotherapy? Sarah Deacon (Townsville)
3.05pm	The efficacy and mechanism of action of EBC46 in head and neck squamous cell carcinoma Ryan Adams (Brisbane)
3.15pm	Identification of molecular and immuno diagnostic cancer markers in Northern Territory indigenous population Rama Jayaraj (Darwin)
3.30pm	Afternoon Tea with the Industry Boulevard Auditorium Foyer

4.00pm Meeting Close







Abstracts (Listed in alphabetical order according to Presenter's surname)

Note: IFHNOS presentations may be viewed on the CD included in the delegate satchels.

THE EFFICACY AND MECHANISM OF ACTION OF EBC46 IN HEAD AND NECK SQUAMOUS CELL CARCINOMA

R. Adams, G. Boyle, B. Panizza, P. Parsons and B. Wallwork

Princess Alexandra Hospital and Queensland Institute of Medical Research Brisbane, Queensland

Head and neck squamous cell carcinoma (HNSCC) is the fifth most common cancer world-wide with an unchanged 50 percent five-year survival rate over the past 30 years. Novel approaches to the burden has shifted to molecular targeted therapies aimed at inducing cancer cell senescence and host immune activation to promote regression and clearance of malignant cells. EBC46 is a novel diterpene ester developed by Qbiotics Pty Ltd which has shown immense promise in many solid tumours in veterinary practise leading to complete tumour clearance with a minimal side effect profile and low incidence of recurrence. We have explored the efficacy of EBC46 in human two HNSCC cell lines in a mouse model whilst also probed into the understanding of its mechanism of action both in-vivo and in-vitro. We found that a single intra-tumoural injection of 30ug of EBC46 has the potential to ablate human HNSCC xenografts of both CAL27 and FaDu cell lines when compared to its vehicle 10mM Sodium Acetate in 20% propylene Glycol pH4.5. In-vitro studies focused on cell survival and Protein Kinase C (PKC) expression and activation post treatment. Our data suggests that EBC46 is more efficacious in-vivo than invitro indicating a major role of the innate immune system activation in tumour clearance. We have also highlighted increased PKC isoform activation post treatment which is known to impact multiple cellular pathways leading to phenotypic changes. Thus the intra-tumoral delivery of EBC46 into human HNSCC xenografts has been shown to slow tumour growth leading to ablation due to the activation of PKC isoforms and enhanced local immune responses.

Declaration: None ..

TONGUE AND FLOOR OF MOUTH CANCER SURGERY: 5 YEAR FILE AUDIT OF TREATMENT, REHABILITATION AND FUNCTIONAL OUTCOMES

Brisbane, Australia

K. Blyth $^{1,\,2,}$ P. McCabe 2, K. J. Ballard 2, C. Madill 2 and J. Clark 1

¹ Royal Prince Alfred Hospital, Sydney, New South Wales ² The University of Sydney, New South Wales

Purpose: To review the oncological treatment, speech pathology rehabilitation, and functional outcomes for patients with tongue and/or floor of mouth cancer treated definitively with surgery over a 5 year period at Royal Prince Alfred Hospital (RPAH).

Methodology: All medical files belonging to patients following definitive excision of partial tongue and/or floor of mouth carcinoma undertaken at RPAH between July 2006 and July 2011 were audited. Data of interest included patient demographics, tumour and surgical details, inpatient and outpatient speech pathology intervention details as well as adjuvant radiotherapy treatment when provided.

Results: 85 patients met the inclusion criteria. 37 patients underwent primary wound closure and 48 had surgical reconstruction. There was a relationship between the number of speech pathology sessions and change in fluids consumed (P < 0.05) as well as change in diet consumed (P < 0.05).

Tumour size, location and presence of reconstruction influenced diet textures consumed at assessment and hospital discharge. The presence of reconstruction was a significant predictor of speech intelligibility at assessment, discharge and following radiotherapy (P<0.05). Speech clarity at the time of assessment was a strong predictor of intelligibility at hospital discharge for those with tongue tumours, whether closed primarily or reconstructed (P<0.01), but not for other reconstructed tumour sites.

Conclusions: Speech pathology intervention is key to rehabilitation for this patient population, particularly following reconstruction. Findings from this audit provide evidence to guide patient pre-operative counselling and post operative referral prioritisation.

Declaration: There is no conflict of interest or commercial affiliation to declare for the authors of this project.



ADAPTIVE RADIOTHERAPY FOR VIRALLY MEDIATED HEAD AND NECK CANCER

E. Brown, S. Porceddu, R. Owen and F. Harden

Radiation Oncology Department, Princess Alexandra Hospital, Brisbane, Queensland

Purpose: Virally mediated head and neck cancers (VMHNC) often present with nodal involvement, and are generally considered radioresponsive, resulting in the need for a re-planning CT during radiotherapy (RT) in a subset of patients. We sought to identify a high-risk group based on nodal size to be evaluated in a future prospective adaptive RT trial.

Methodology: Between 2005-2010, 121 patients with virally-mediated, node positive nasopharyngeal (EBV positive) or oropharyngeal (HPV positive) cancers, receiving curative intent RT were reviewed. Patients were analysed based on maximum size of the dominant node with a view to grouping them in varying risk categories for the need of re-planning. The frequency and timing of the re-planning scans were also evaluated.

Results: Sixteen nasopharyngeal and 105 oropharyngeal tumours were reviewed. Twenty-five (21%) patients underwent a re-planning CT at a median of 22 (range, 0-29) fractions with 1 patient requiring re-planning prior to the commencement of treatment. Based on the analysis, patients were subsequently placed into 3 groups; ≤35mm (Group 1), 36-45mm (Group 2), ≥46mm (Group 3). Re-planning CT's were performed in Group 1- 8/68 (11.8%), Group 2- 4/28 (14.3%), Group 3- 13/25 (52%). Sample size did not allow statistical analysis to detect a significant difference or exclusion of a lack of difference between the 3 groups.

Conclusion: In this series, patients with VMHNC and nodal size > 46mm appear to be a high-risk group for the need of re-planning during a course of definitive radiotherapy. This finding will now be tested in a prospective adaptive RT study.

Conflict of Interest Declaration: The authors have no conflicts of interest to declare.

EVALUATION OF A SPEECH PATHOLOGY TELEHEALTH SERVICE FOR HEAD AND NECK CANCER PATIENT SUPPORT

C. Burns¹, L. Ward^{2,3,} K. Malcolm⁴, L. Bassett¹, F. Del Rosso⁵, L. Kenny⁶ and P. Greenup⁷

 ^{1.} Speech Pathology, Royal Brisbane and Women's Hospital, Queensland Health, Queensland
 ² Centre for Functioning and Health Research, Queensland Health, Queensland
 ³ School of Health & Rehabilitation Sciences, The University of Queensland, Queensland
 ⁴ Speech Pathology, Nambour General Hospital, Queensland Health, Queensland
 ⁵ Office of CEO, Metro North, Queensland Health, Queensland
 ⁶ Central Integrated Regional Cancer Services, Queensland Health, Queensland
 ⁷ Statewide Telehealth Services, Queensland Health, Queensland

Purpose: Speech Pathologists have a key role in the management of swallowing and communication difficulties experienced by Head and Neck (H&N) cancer patients. For patients living outside metropolitan centres such as Royal Brisbane and Women's Hospital, where the majority of H&N cancer services are provided, access to specialist speech pathology services can result in significant issues and costs. Following on from this team's research, demonstrating the potential for telerehabilitation in speech pathology management (Ward et al, 2007; 2009), the current research evaluates a 6 month pilot service providing specialist speech pathology services for H&N cancer management via a telerehabilitation clinic within Queensland Health.

Methodology: A dedicated weekly telehealth clinic was established for patients with H&N cancer between the speech pathology departments of a metropolitan health service (RBWH) and a regional health service (Nambour General Hospital). A range of services were provided including pre treatment counselling and early intervention, supportive assistance, monitoring during treatment and post treatment follow up. Specialist clinical cameras with real-time video and audio recording were utilised.

Results: The impact of this new service model was evaluated, showing positive results from the patient, clinician and service perspectives, including evaluation of service statistics, cost benefit analysis, patient and clinician satisfaction and clinical training opportunities.

Conclusions: A formalised and coordinated telehealth service using a hub-spoke model enhances patient access to specialist speech pathology services, quality of patient care, and provides strategic staff training. This information will inform the expansion of telehealth services for allied health cancer management.

Abstracts (cont'd)

SWALLOWING FUNCTIONAL OUTCOMES OF RADIOTHERAPY (+/- CHEMOTHERAPY): ANOTHER PIECE TO THE PUZZLE

S. Chandler, V. Simms, R. Robinson and R. Smee

Prince of Wales Hospital, New South Wales

Background: A prospective longitudinal database developed in 2010 at the Prince of Wales Hospital (POWH) was designed to capture information on the functional impact of head and neck cancer treatment on communication and swallowing during and post treatment (up to 5 years). Results drawn from this database will be used to investigate swallowing function during and after radiotherapy (+/- chemotherapy) for up to six months post treatment.

Methods: Participants include head and neck cancer patients treated with definitive radiotherapy (+/chemotherapy) at the POWH. Swallowing function and oral intake were measured prospectively, before during and after treatment, using the Australian Therapy Outcome Measures Scales (AUSTOMS) of swallowing Impairment and activity limitation; the Functional Oral Intake Scale (FOIS) and quantitative measures of barriers to oral intake. Patient demographic variables such as level of social support and place of residence were recorded to analyse between group variances in swallowing function over time.

Results: The pattern of swallowing function and oral intake in this group of radiotherapy (+/- chemotherapy) patients will be presented over multiple time points before, during and up to six months post treatment. Barriers to oral intake (acute and chronic) and the impact of demographic variables will also be presented. Findings will be discussed in the context of providing optimal service delivery with emphasis on meeting the varying needs of our patients during and post treatment.

Conflict of Interest Declaration: Nothing to declare.

HUMAN PAPILLOMAVIRUS STATUS OF OROPHARYNGEAL CANCER: A PREDICTOR OF TOLERANCE TO RADIOTHERAPY?

R. C. Capper, S. L. Deacon and K. N. Payne

Townsville Cancer Centre, The Townsville Hospital, Queensland

Purpose: Human Papillomavirus (HPV) is changing the face of oropharyngeal cancer. The rise in detection rates has redefined the role of oncology allied health professionals with a shift to increased clinical workload demand. HPV P16 positive oropharyngeal cancer patients treated at the Townsville Cancer Centre within the last 18 months were noted to show greater deterioration during radiotherapy; a disparity to their favourable long term prognosis evidenced within current literature.

Methodology: A retrospective chart audit was conducted on 46 oropharyngeal cancer patients treated with radical radiotherapy. Data was collated regarding demographics, diagnosis, treatment, weight, feeding intervention, hospital admission and radiation side effects. Comparisons were made between HPV P16 positive (P16+) and HPV P16 negative (P16-) cancer groups.

Results: P16+ cancers represented 54% of the population. Comparison of total body weight loss between P16+ (10%) and P16- (5%) cancer groups was statistically significant (p<0.05). Hospitalisation occurred in 35% of all cases with P16+ cancer patients accounting for 69% of admissions. Dehydration and nutritional intervention was the most common reason for admission.

Conclusion: These results have highlighted the necessity of customising health care for oropharyngeal cancer patients with a HPV P16 diagnosis. The significance of frequent hospital admissions within an outpatient service indicates a need for intensifying nutritional intervention to prevent admission. Strengthening multidisciplinary care will be the way forward to improving HPV P16+ patients tolerance to radiotherapy.

Conflict of Interest Declaration: We verify that there is no conflict of interest with this contribution.



THE PREDICTIVE VALUE OF 18F-FDG PET-CT SCAN PERFORMED IN THE THIRD WEEK OF CHEMORADIATION FOR LOCALLY ADVANCED HEAD AND NECK SQUAMOUS CELL CANCER

A. Fowler, D. Forstner, M. Tieu, P. Lin and I. Ho Shon

Departments of Cancer Therapy and Nuclear Medicine, Liverpool Hospital, New South Wales

Purpose: To assess the value of Fluorine-18-Fluoroxyglucose(18F-FDG) positron emission tomography and computed tomography (PET-CT) performed in the 3rd week of treatment in patients with head and neck squamous cell carcinoma (HNSCC) treated with chemotherapy and intensity modulated radiation therapy (IMRT).

Methodology: 24 patients with locally advanced disease were included. All underwent a baseline PET-CT scan. Patients were treated on a consistent chemoradiation protocol. All patients completed planned radiation treatment. Repeat PET-CT scans were performed in the 3rd week of treatment and again 3 months after treatment. Metabolic response was assessed using qualitative criteria. No treatment plans were adapted or modified during the course of treatment. All patients had a minimum follow-up of 24 months.

Results: After a mean follow-up of 28 months, 20 patients were alive and free of evident disease. 4 patients had died at intervals of 13, 15, 17 and 24 months since diagnosis. Locoregional relapse was a component of relapse for all of the 4 patients who died. Three patients had a complete metabolic response (CMR) on week 3 PET-CT with 2yr RFS of 100%. 17 patients had a partial metabolic response (PMR) on week 3 PET-CT with 2yr RFS of 88%. 4 patients had stable disease or mixed response/progression on week 3 PET-CT with a 2yr RFS of 50%.

Conclusion: The prognostic value of a qualitative week 3 PET-CT during chemoradiation for locally advanced HNSCC is limited. Small numbers of patients with sensitive disease have a very early CMR and a favourable outcome. Patients with no or minimal response at week 3 PET-CT have a poor outcome and may benefit from alternate or intensified treatment. However the majority of patients experienced a partial response and this alone was not predictive of outcome.

Conflict of Interest Declaration: None to declare.

HEAD AND NECK CANCER MENTORING PROGRAM - SUPPORTING ALLIED HEALTH STAFF IN QUEENSLAND

A. J. Fraser, K. Hancock and T. Brown

Royal Brisbane and Women's Hospital, Queensland Health, Queensland

Head and Neck Cancer (HNC) is a complex specialty area that requires significant interdisciplinary involvement. Following treatment in tertiary centers, patients are commonly transferred to regional centers requiring allied health follow-up. These staff may have limited experience with HNC which led to development of a pilot structured HNC mentoring program in 2010. The program incorporated five interactive videoconferences. One-onone telephone mentoring was provided by an experienced speech pathologist, dietitian or dentist to advise on common problems such as swallowing, communication, feeding difficulties, oral heath and psychosocial issues. Fifty allied health and nursing staff participated. Participants reported (64.0% response rate) the program was relevant to their work (100.0%), improved confidence (90.6%), networking opportunities (90.6%), knowledge and skills (96.9%), and would assist clinical practice improvements to impact on patient outcomes (96.9%). All line managers felt the program enhanced staff's knowledge, skills, and confidence in managing HNC patients (42.9% response rate). In 2011 the program consisted of six videoconferences with 92 participants from 19 sites around Queensland, and 36 staff accessed mentoring. Due to funding restructuring in 2012, the one-on-one mentoring component is not offered. The videoconference program has been revised to incorporate presentations, information sharing, and peer support mentoring. The group currently has 90 members across nursing, allied and oral health. This is an example of a successful interdisciplinary support and professional development program with a demonstrated perceived need among allied health professionals. It highlights that technology can assist networking and information sharing for clinicians despite distance.

Conflict of Interest Declaration: Our contribution is free from any conflict of interest.

Abstracts (cont'd)

IT DOES GET BETTER – IMPROVING INFORMATION FOR SURVIVORSHIP FROM TREATMENT FOR HEAD AND NECK CANCER

A. J. Fraser and J. Turner

Royal Brisbane and Women's Hospital, Queensland Health, Queensland

Psychosocial morbidity is high in patients with head and neck cancer (HNC), and this is exacerbated by treatments which often lead to mucositis, difficulty with eating and communicating, and pain. These problems commonly persist over time. Whilst HNC patients at the RBWH are well supported with information and education prior to and during treatment, many perceive that there is limited information or support on completion of treatment, and this is known to be a time of increased psychological vulnerability. In response to the unmet needs of HNC patients on completion of treatment, the Cancer Care Coordinator and psychiatrist collaborated with the multidisciplinary team to develop an information booklet for HNC patients finishing chemo and/or radiation treatment. The content is derived from the literature, informed by clinical experience, and refined on the basis of patient feedback. It includes information on exercise, diet, coping with stress, social concerns, accessing support, and provides a list of key professionals and organisations, supplemented with tips from past patients. A pilot evaluation of the resource was conducted with 50 patients in 2010/11. Completed questionnaires were returned by 20 patients of whom 100% endorsed the length, 90% the usefulness of the information, and 80% would highly recommend it to others. Almost 50% of patients indicated preference to receive the booklet before the last week of treatment. On the basis of these findings, funding is being sought for a trial of this resource compared with a nurse-led intervention for HNC patients on completion of treatment.

Conflict of Interest Declaration: Our contribution is free from conflict of interest.

SURGERY OR CHEMORADIOTHERAPY FOR ORAL CAVITY SCC? : A COMPARATIVE STUDY OF DISEASE AND FUNCTIONAL OUTCOMES

S. M. Gore, V. Choi, K. Gao, S. Ch'ng, A. Crombie, M. Batstone and J. Clark

Sydney Head and Neck Cancer Institute, Sydney, New South Wales and The Royal Brisbane & Women's Hospital, Brisbane, Queensland

Objectives: To compare disease and functional outcomes of patients diagnosed with oral cavity Squamous Cell Carcinoma (SCC) treated by surgery or chemoradiotherapy.

Methods: Data was collected prospectively in two centres. All patients treated for oral cavity SCC between 2001 and 2007 with primary chemoradiotherapy (Royal Brisbane & Women's Hospital) or surgery ± radiotherapy (Sydney Head & Neck Cancer Institute) were included. Patient data included age, sex, co-morbidity scores and disease stage (TNM). In the surgical group, tumour excision margin, neck dissection & radiotherapy dose was recorded. In the nonsurgical group, radiotherapy dose & drug combination was noted. In all cases duration of follow up, time to recurrence, rates of osteoradionecrosis (ORN) and the requirement of feeding tube support was recorded. Patients with incomplete treatment data or follow-up were excluded.

Results: 106 surgical patients and 53 non-surgical patients met the inclusion criteria. Non-surgical cases had higher T and N stages at presentation. The difference in 2-year and 5-year overall survival between the two groups was statistically significant (2-year - surgical: 90 %, non-surgical 50 %, 5-year - surgical: 81 %, non-surgical 30 %, p<0.001, Logrank test);. The 5-year Disease Specific Survival was 89% (surgical) and 32% (non-surgical). Surgical cases had less ORN (1.9 %) than non-surgical cases (9.4 %). Rates of feeding tube support at discharge were 20.1% (surgical 15.1%, non-surgical 30.2 %).

Summary: In these two groups survival rates were higher following surgical treatment. Overall survival differences were less marked when adjusted for T-stage and N-stage at presentation. This data supports the use of traditional treatment algorithms for oral cavity squamous cell carcinoma.

Conflict of Interest Declaration: The authors have no conflict of interest to declare.



CURRENT CONCEPTS IN MDT MANAGEMENT: WHAT CAN AHPS CONTRIBUTE TO TREATMENT DECISION-MAKING?

R. Govender

United Kingdom

Allied health professionals have a well established role in the rehabilitation of patients following treatment for head and neck cancer. In recent years, it has become increasingly standard for AHPs to attend the MDT meetings. However, their active participation in and contribution to treatment decisions remains a relatively untapped resource. This talk uses evidence from local projects to highlight some of the insights which AHPs (SLPs for the purpose of this presentation) bring to the discussions about treatment choice.

• Baseline assessments: the value of pre-treatment functional assessment to overall post treatment outcomes is demonstrated.

• Patient involvement in decision making: A pilot study illustrating the importance of determining patient priorities and acceptance of functional morbidity (cure vs functional trade-offs).

• Functional outcomes: Analysis of functional outcomes across treatment approaches provides information which can inform the MDT about the impact of different treatment modalities on speech and swallow function within individual settings.

For AHPs, being proactive in undertaking even small scale research projects locally can provide the necessary stimulus to encourage more contribution and collaboration within MDT meetings about treatment decision making for individual patients. For our surgical and oncology colleagues, including AHPs in the design and implementation of clinical trials which seek to assess the merits of different treatment protocols can only enhance the impact of such research on overall patient care.

MEASURING OUTCOMES: EXPLORING THE WAY TO CONSISTENCY

R. Govender and N. Lawson

To demonstrate effective interventions and the provision of high quality health care services, health professionals need to evaluate patient outcomes as a routine part of clinical practice. Unsworth et al ^[1] reported that while health professionals support the notion of measuring health status, there is no consensus regarding the method of measurement or outcome measures that should be used. In clinical practice the use of outcome measures by speech pathologists in Australia is believed to be widely variable and inconsistent.

This presentation aims to:

1. Discuss the type of outcome measures available for head and neck cancer patients.

 Present the results of an online survey about the current use of outcome measures with head and neck cancer patients by speech pathologists across Australia.
 Explore interest and possible research opportunities to promote consistent use of outcome measures by Australian speech pathologists working with head and neck cancer patients.

The online survey aimed to gather information about the facility clinicians work in; the current status of outcome measure data collection within the multidisciplinary team and/or speech pathology; the type of outcome measures in use; the barriers preventing outcome measures data collection; and the interest in future collaborative work to establish a consistent approach to the use of outcome measures in Australia.

Experiences from work in the UK around this topic will provide a starting point for discussion. It is anticipated that an interactive format for this presentation will facilitate sharing of ideas, discussion and decisions about future directions for optimizing use of outcome measures for head and neck patients. Whilst the survey was targeted at speech pathologists, it is expected that the general principles and lessons will be broadly applicable to all allied health disciplines. We look forward to a lively exchange of ideas and stimulating dialogue which will help shape future conversations amongst clinicians who choose to take this work forward.

^[1] Validity of the AusTOM scales: A comparison of the AusTOMs and EuroQol-5D. Carolyn A Unsworth1, Stephen J Duckett2*, Dianne Duncombe1, Alison Perry3, Jemma Skeat3 and Nicholas Taylor4 http://www.hqlo.com/ content/2/1/64/

Abstracts (cont'd)

DEVELOPMENT AND PRELIMINARY VALIDATION OF A PATIENT-REPORTED OUTCOME MEASURE FOR SWALLOWING AFTER TOTAL LARYNGECTOMY (SOAL QUESTIONNAIRE)

R. Govender, M. T. Lee, T. C. Davies, C. E. Twinn, K. L. Katsoulis, C. L. Payten, R. Stephens and M. Drinnan

Background and Aims: To develop and validate a laryngectomee-specific questionnaire to investigate swallowing function. Swallowing questionnaires currently used clinically and in research have been developed for individuals with an intact larynx.

Methods: This study was implemented in 2 phases; questionnaire development and questionnaire validation. Items were developed from patient (n=10) and clinician (n=6) focus groups. Content checking, acceptability and face validity was determined through pre-testing with 10 laryngectomees and via consensus feedback from a group of 35 speech and language therapists. For the preliminary validation, the 17-item final questionnaire was administered to 3 different groups. Discrimination amongst groups was established by comparing questionnaire responses of a laryngectomee group (n=19) with known dysphagic (n=19) and non dysphagic groups (n=20). Questionnaire responses from the reference dysphagic group were compared with an instrumental assessment of swallowing, the modified barium swallow (MBS).

Results: The normal, laryngectomee and dysphagic groups had significantly different SOAL scores, as did laryngectomees with different degrees of swallowing impairment (Kruskall Wallis, p < <0.001). The subjective SOAL score had a strong positive correlation with the reference measure, ratings on the MBS (r = 0.5; p = 0.03).

Conclusions: The swallowing outcome after laryngectomy (SOAL) questionnaire is a simple, self-administered tool to assess swallowing function post total laryngectomy. Further specific testing with a laryngectomy cohort is necessary for full validation. Its potential value lies in screening for dysphagia in clinics, or during long term follow-up of laryngectomees.

FASCIOCUTANEOUS AND OSTEOCUTANEOUS FREE TISSUE TRANSFER OUTCOME OPTIMIZATION UTILIZING INTRAOPRATIVE FLUORESCENT ANGIOGRAPHY IN HEAD AND NECK RECONSTRUCTION

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Introduction: Composite tissue defects in the head and neck region present unique challenges. These cases are often complicated by complex 3-dimensional arrays that may require multiple flap and/or chimeric flap procedures for definitive head and neck reconstruction. These advanced techniques have serious repercussions as their associated complications of poor tissue perfusion and flap failure can have devastating adverse outcomes.

Methods: A retrospective review was completed for those complex reconstructions utilizing free tissue transfers and fluorescent indo-cyanine green angiography (Novadaq SPY® imaging) at our center, Walter Reed National Military Medical Center, over a 24 month period. Data analyzed included flap type (myocutaneous, osteocutaneous, fasciocutaneous, muscle, perforator, versus chimeric flaps), flap success and failure rates, and complications.

Results: A total of 61 free flaps were performed including 11 head and neck flaps. The head and neck flaps included 1 Latissimus, 3 gracilis, 1 vastus lateralis, 4 ALT, and 2 fibular osteocutaneous. Overall success rate was 98.4%, 1 flap was lost, and two flaps suffered partial flap necrosis (3.3%). Utilizing SPY® imaging, there was one total flap loss due to a hypercoagulable condition (99% success rate). No cases exhibited unpredicted partial flap necrosis.

Conclusion: Free tissue transfer can be technically challenging especially in complex head and neck reconstruction. An algorithmic approach employing the use of SPY® imaging aids in pedicle location, angiosome assessment, soft tissue perfusion evaluation, and anastomotic flow visualization. This objective tool can assist the reconstructive surgeon in avoiding perfusion related complications, total/partial flap losses, thus improving patient outcomes.



THE POPULATION BENEFIT OF RADIOTHERAPY FOR HEAD AND NECK MALIGNANCIES: LOCAL CONTROL AND SURVIVAL ESTIMATES FOR LARYNX CANCER AND ORAL CANCER

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Purpose: To determine the population-based benefit of radiotherapy for head and neck cancer (and ultimately all cancers), starting with larynx cancer and oral cancer. Clinical trials describe the benefit of radiotherapy for highly selected subgroups. It is unknown what the magnitude of benefit to the whole population would be if evidence-based guidelines were followed.

Methodology: The proportional XRT benefit was added for each indication to pre-existing decision trees. XRT benefits were the benefit of radiotherapy over no treatment for radical indications and the benefit of adjuvant radiation over surgery alone for adjuvant indications. Chemoradiotherapy (CRT) benefit was the incremental benefit of chemoradiation over XRT. 5-year local control (LC) and overall survival (OS) were investigated. Multiple electronic citation databases were systematically queried. If there were multiple sources of the same level of evidence, a meta-analysis was performed. To determine model precision, sensitivity analysis was performed.

Results: Guidelines supported 22 indications (14 XRT/8 CRT). 19 relevant sources were identified. 71% of patients had XRT or CRT indications. 5-year absolute benefits of optimally utilized XRT were: larynx cancer (LC 59%(95%Cl 53,64), OS 39%(35,44)), oral cancer (LC 16%(12,20), OS 6%(4,8)). CRT benefit over XRT for larynx cancer was LC 2%(1,2), OS 1%(1,2) and similar for oral cancer. Sensitivity analysis identified stage I/II glottic cancer laser surgery rates, and oral cancer adjuvant XRT benefit as the greatest sources of uncertainty in the model.

Conclusions: Radiotherapy provides a significant benefit to the larynx cancer patient population in Australia when used according to guidelines. The oral cancer benefit is smaller. Chemoradiation provides a modest population benefit over XRT.

Conflict of Interest Declaration: None.

IDENTIFICATION OF MOLECULAR AND IMMUNO DIAGNOSTIC CANCER MARKERS IN NORTHERN TERRITORY INDIGENOUS POPULATION

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Purpose: Complete excision of cancer is guided by histological assessment of surgical margins. Molecular markers could be more sensitive to identify the malignant cells. P53 and eIF4E are found elevated 100% and 40-60% respectively in all head and neck squamous cell cancers (HNSCC). Over expression of these molecular markers in histologically tumour-free surgical margins correlated with a higher local-regional recurrence. Our aim is to study the expression and correlation of p53 and eIF4E on histological tumour free surgical margins and also to determine whether eIF4E is more sensitive marker than p53.

Patients and Methods: Immunohistochemical analysis was performed on surgical margins with antibodies to tumour prognostic markers (p53and eIF4E) of HNSCC patients who underwent surgical resection for their disease between March 2005 and December 2009 at Royal Darwin Hospital.

Results: Out of 24 HNSCC patients, 21(87%) patients have elevated levels of elF4E and 13 (54%) patients have also elevated level of p53 in the tumours. There was a significant correlation between p53 and elF4E being positive in the margins (P = 0.046). Chi-square test was used to investigate the association between the expression of p53 and elF4E and categorical variables like sex, age, Indigenous/non-Indigenous, TNM staging, and site of diagnosis respectively. The Kaplan-Meier curves were used to investigate the survivability of head and neck cancer patients with over expression of p53and elF4E on histological tumour free surgical margins.

Conclusion: The overexpression of eIF4E in the margins appears to be more sensitive indicator of recurrence.

Conflict of Interest Declaration: None.

Abstracts (cont'd)

A PROSPECTIVE EPIDEMIOLOGICAL STUDY ON INTRABONY LESIONS OF THE JAWS IN QUEENSLAND

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Royal Brisbane and Womens' Hospital

Purpose: This study investigated the incidence of odontogenic and non-odontogenic intrabony lesions located in the maxilla and mandible in the Queensland population over a 12 month period.

Methods: Data was prospectively collected from January 2011 to December 2011. Information sourced from private and public histopathology laboratories was: gender, age, location of tumour, histopathological diagnosis of the tumour and the postcode the patient lives in. The sample size was the Queensland population (4.58 million as at June 2011).

Results: There were 573 odontogenic intrabony lesions collected in 2011. There were 20 ameloblastoma variants (M:F 15:5, Age range: 5-86 yrs, Mandible:Maxilla 16:4). There were 71 Keratocystic odontogenic tumours. There were 90 dentigerous cysts and 214 radicular cysts. There were 149 odontogenic cysts that could not be placed in any of the aforementioned groups due to no clinical details being provided to the histopathologist. Other rare pathoses included odontogenic myxofibroma, botryoid, haemorrhagic and glandular odontogenic cysts and calcifying cystic odontogenic tumour. There were 40 non-odontogenic intrabony lesions collected in 2011. The Male: Female ratio was 1:1, age range of 7-75 years and the Mandible:Maxilla ratio was 27:13. The most common pathoses were fibrous dysplasia (11 cases), nasopalantine cyst (8 cases) and central giant cell granuloma (6 cases). Other rare pathoses included chondroblastic osteosarcoma, Ewing's Sarcoma and multiple myeloma.

Conclusion: The incidence of odontogenic intrabony lesions in the Queensland population is 125/million. Ameloblastoma is 4.37/million, KCOT is 15.5/million and dentigerous cyst is 19.6/million. The incidence of non-odontogenic lesions in the Queensland population is 8.7/million.

Conflict of Interest Declaration: All authors declare that their contributions are free of any conflict of interest. This research was undertaken by a grant from the Australian and New Zealand Association of Oral and Maxillofacial Surgeons.

AUSTRALIAN AND NEW ZEALAND SURVEY ASSESSING THE ATTITUDES OF HEAD AND NECK CLINICIANS TOWARD THE USE OF PET IN THE RE-STAGING AND MANAGEMENT OF HNSCC FOLLOWING (CHEMO)RADIOTHERAPY

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Purpose: Due to the increasing use of PET in the management of node positive head and neck cancer (HNC) following chemo-radiotherapy (RT) the ANZHNCS, in collaboration with the University of Queensland (UQ), conducted a survey to assess the attitudes toward the role of re-staging PET, with the view to help inform the society in developing Australian/NZ-specific contemporary neck management guidelines.

Methodology: The online survey consisted of 10 questions obtaining clinician demographics, and responses to the value of PET in various clinical scenarios. The study had UQ ethics approval and endorsement by the ANZHNCS Executive. The electronic mail-out was sent to 148 clinicians.

Results: There were a total of 88 (60%) respondents: 51 (58%) surgeons, 32 (36%) radiation oncologists and 5 (6%) medical oncologists. Thirty-three respondents (37.5%) reported seeing 11-20 new HN (non-skin) cases per month in an MDT, with 97% having easy access to PET. For oropharyngeal SCC participants were more likely to trust the re-staging PET with respect to the neck, regardless of the presence of a residual node if the primary tumour was p16 positive compared with p16 negative. For primary laryngeal/hypopharyngeal SCC the majority of respondents (55%) would be prepared to observe the neck if the PET was negative providing the residual node was <3cm, and/ or there was no necrosis.

Conclusions: The PET appears to be an accepted restaging tool amongst ANZHNCS members. These results will provide data for the formulation of ANZHNCS guidelines in the management of the post-therapy neck.

Conflict of Interest Declaration: The presenter and all authors declare that there is no conflict of interest in their role in this research and abstract. There is no commercial affiliations or relationships that can be viewed as potential conflict of interest.



ONCOLOGIC RESULTS AFTER TRANS ORAL ROBOTIC SURGERY IN THE FIRST PROCTOR-LEVEL ROBOTIC HEAD AND NECK CENTER IN GERMANY

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Purpose: Trans Oral Robotic Surgery can effectively reduce collateral tissue damage and treatment-related morbidity when treating tumours of the pharynx and supraglottis. Our purpose was to define a patient population where TORS can replace open surgey or primary chemoradiation while providing the same oncological results with superior functional outcomes.

Methods: We selected 31 HNSCC-patients for our initial series, having each of them approved by our Multidisciplinary H&N Board for this modality. All patients were operated by the same surgeon using the daVinci System. Intraoperative frozen sections were taken to secure clear resection margins. Depending on the cTNM-stage, appropriate selective neck dissections were performed either simultaneously or in a staged manner, if indicated.

Results: No patient required tracheostomy. Blood loss and operating times (including setting up, anaesthesia and docking the robot) were recorded. All patients resumed swallowing in 5-7 days postoperatively, so that the nasogastric feeding tube could be removed and the patients were discharged on day 6-8. Clear margins were achieved in all but one case, where the tumour was postoperatively upstaged from cT2 to pT4a due to microscopic muscle infiltration, despite the negative intraoperative frozen sections. Consequently, we performed a wide re-resection with radial forearm free flap reconstruction on day 5.

Conclusion: TORS is a safe and oncologically sound method for the treatment of up to larger T2 malignancies of the head and neck. It can effectively reduce actual operating times and blood loss, with superior functional outcomes. We are convinced that TORS will play an increasing role in the treatment of H&N malignancies, especially due to the worldwide increasing incidence of HPV-positive oropharyngeal SCC.

Conflict of Interest Declaration: Disclosure statement: Dr Lorincz does lecturing and TORS-training for Intuitive Surgical, Inc. as a contracted daVinci-proctor.

PREDICTORS OF LOCOREGIONAL RELAPSE, DISTANT RELAPSE AND OVERALL SURVIVAL IN LOCOREGIONALLY ADVANCED OROPHARYNGEAL CANCER IN THE ERA OF HPV

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Purpose: To determine prognostic factors for locoregional relapse (LRR), distant relapse (DR), and overall survival (OS) in a contemporary cohort of locoregionally advanced oropharyngeal squamous cell carcinoma (OSCC) treated uniformly with definitive chemo-radiotherapy (RT).

Methodology: 113 patients treated between 2005 and 2009 with a minimum 2 year follow-up were identified from the Princess Alexandra Hospital prospective head and neck database. Volumetric planning data was retrievable for 96. Of these 96 patients, 79 patients were male and 66 patients were p16 positive. Patient age, gender, smoking history, p16 status, T stage, N stage, lowest involved nodal level and gross tumour volume of the primary (GTV-p) and nodal (GTV-n) disease were analysed in relation to LRR, DR and OS by way of univariate and multivariate analysis.

Results: On univariate analysis p16-negativity, increasing GTV-p and T-stage were correlated with worse outcomes with respect to LRR, DR and OS. Level IV nodal involvement and N3 disease were associated with a higher risk of DR but not LRR. On multivariate analysis p16 status remained the strongest predictor of LRR and OS but not DR. GTV-p and T-stage remained significant predictors of LRR, DR and OS when adjusted for HPV status.

Conclusions: Tumour p16 status was the strongest predictor of LRR and OS. GTV-p and T-stage had prognostic value independent of p16 status.

Conflict of Interest Declaration: There are no conflicts of interest to declare.

Abstracts (cont'd)

DYSPHAGIA IS A PREVALENT AND UNDER RECOGNIZED COMPLICATION OF HEAD AND NECK RADIOTHERAPY

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Purpose: Dysphagia is a well recognized acute (<1 year) complication post radiotherapy however the true long-term prevalence remains unknown. The aim of this study was to document the prevalence and clinical severity of dysphagia as a long term complication of head and neck radiotherapy.

Methodology: An observational cross-sectional study was conducted in a large consecutive series of head and neck cancer patients. All patients on the St George Hospital Cancer Care database, who had received head and neck radiotherapy with curative intent 3 - 8yrs previously and recorded as being alive were contacted by mail (n = 115). Dysphagia severity was measured using the Sydney Swallow Questionnaire (SSQ)*. Non-responders were followed up by phone call.

Results: Patients were surveyed a mean 3yrs (range 1-8) post radiotherapy. From initial mail out of 115 questionnaires, 75 (69%) SSQ and 58(54%) QOL were returned. Phone follow-up improved the response rate to 81/113 (71%) for SSQ, and revealed that 2 patients have died. Impaired swallowing (SSQ Score > 200) was reported in 64% of patients. Most frequent complaints were inability to swallow dry (61%) or hard foods (62%), food sticking in throat (58%) and symptoms of aspiration were reported in 47%. Five (6%) of patients reported not being able to eat at all.

Conclusions: Dysphagia is a very prevalent long term complication of head and neck radiotherapy with significant number of patients reporting swallowing dysfunction. Swallowing dysfunction seems to be under-recognized by both patients and their clinicians.

* SSQ - Wallace KL, et al. Development and validation of a self-report symptom inventory to assess the severity of oral-pharyngeal dysphagia. Gastroenterology 2000;118:678-687.

Conflict of Interest Declaration: The authors declare that their contribution is free of any conflict of interest however declare their research funding sources: Cancer Institute NSW, St George Hospital Dept of Radiation Oncology Research Fund, Brian and Pearl Bowles Fund and St George and Sutherland Medical Research Foundation.

OESOPHAGEAL DYSMOTILITY IN LARYNGECTOMY PATIENTS: AN UNRECOGNIZED ASSOCIATION?

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Purpose: Post laryngectomy dysphagia is an under recognised problem with significant morbidity. While primarily related to pharyngeal neuromyopathic dysfunction and pharyngo-oesophageal junction fibrotic stenosis, we have encountered a significant proportion of laryngectomees to have oesophageal dysphagia. The purpose of this study was to determine the incidence of oesophageal dysmotility in a cohort of laryngectomees reporting dysphagia.

Methodology: Sixteen laryngectomees who presented to our multidisciplinary Swallow Clinic with dysphagia between Jan 2008-May 2011 all underwent clinical and radiographic assessment of swallowing. Oesophageal manometry was performed in nine consecutive cases.

Results: Sixteen patients underwent evaluation of swallowing a median of 6 years post laryngectomy (range 1-18 yrs), all patients had received radiotherapy and 3 chemoradiation. Radiographic swallow studies revealed 75% (n=12) had pharyngo-oesophageal stenosis requiring dilatation. A radiographically demonstrated dilated oesophagus indicating oesophageal dysmotility was present in 56% (n=9) of the cohort, five of whom (55%) had an intercurrent pharyngo-oesophageal stenosis that required dilatation. All nine patients who underwent oesophageal manometry had aperistalsis. Two laryngectomees (22%) had classic achalasia with a concurrent failed lower oesophageal sphincter relaxation.

Conclusions: In this small consecutive case series, we report an unrecognized association between laryngectomy +/- radiotherapy and aperistalsis, 22% of whom also have achalasia and impaired LES relaxation. Co-existent oesophageal dysmotility needs to be considered in the dysphagic laryngectomee, particularly if they fail to respond to dilatation of the frequently identified concurrent cricopharyngeal stricture.

Conflict of Interest Declaration: The authors declare that their contribution is free of any conflict of interest however declare their research funding sources: Cancer Institute NSW, St George Hospital Dept of Radiation Oncology Research Fund, Brian and Pearl Bowles Fund and St George and Sutherland Medical Research Foundation.



IMPACT OF NECK DISSECTION ON SCAPULAR MUSCLE FUNCTION: A CASE CONTROLLED EMG STUDY

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Purpose: Accessory nerve injury resulting from neck dissection causes trapezius muscle weakness, affecting scapular biomechanics. This can lead to shoulder pain and dysfunction. The aim of this study was to assess the dynamic activity of scapular muscles in patients with accessory nerve dysfunction, compared to both their unaffected side, and to age and gender matched healthy controls.

Methodology: The study was a case control investigation. One group consisted of 10 neck dissection patients with demonstrated clinical signs of accessory nerve injury. The second group was composed of 10 matched healthy individuals. Surface electromyographic (EMG) activity of the upper trapezius, middle trapezius, rhomboid major and serratus anterior muscles were compared dynamically during scapular strengthening exercises.

Results: The neck dissection affected side demonstrated significantly less upper trapezius and middle trapezius muscle activity compared to the neck dissection unaffected side, and the matched control group. The neck dissection unaffected side had significantly less upper trapezius muscle activity than the matched control group. A trend towards increased serratus anterior muscle activity was demonstrated in the neck dissection affected side, which suggests a compensatory mechanism to address the reduced trapezius muscle activity.

Conclusions: This is the first study to investigate the dynamic EMG activity of scapular muscles in the neck dissection population. Rehabilitation of patients with accessory nerve injury is not currently tailored to the muscle activity findings of this study. Specific scapular muscle rehabilitation, based on demonstrated muscle activity patterns, has the potential to limit the development of painful secondary shoulder conditions in neck dissection patients.

Declaration: Aoife McGarvey is supported by the Hunter New England Allied Health Research Committee Grant awarded in 2011; the James Lawrie Research Grant awarded in 2009 by the Calvary Mater Newcastle Hospital; and the Hunter Medical Research Institute Barker Scholarship awarded in 2011. This contribution is free from any conflict of interest.

CONTINUING CONVERSATIONS IN THE COMMUNITY: IMPROVING ACCESS TO SPECIALIST CARE IN THE COMMUNITY FOR PATIENTS POST LARYNGECTOMY

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Surgical Voice Restoration is recognised throughout the western world as the gold standard in communication rehabilitation for people who have undergone laryngectomy. Despite high success rates, the complexities of managing a voice prosthesis can be difficult, and sometimes impossible, for those with vision impairment, cognitive impairment and /or problems with manual dexterity. The reduced capacity to independently manage a voice prosthesis may be identified prior to laryngectomy, however in some cases, it is identified many years post-laryngectomy in patients experiencing changes in sensory, physical and cognitive functions consistent with the ageing process or related to co-morbid medical conditions.

Patients with limited family and social support and reduced capacity to independently maintain their voice prosthesis often rely solely on health professionals to provide this care. Difficulties accessing this care can result in extended periods without verbal communication, and potential dysfunction of the voice prosthesis leading to tracheal aspiration of oral intake, significantly impacting a person's ability to function within the home and community environments. Whilst this care is not complex, it is specialised, and requires education and training to ensure appropriate care is provided confidently with a clear understanding of emergency management strategies.

This paper introduces an interactive care package designed for patients, carers and community nursing staff to support and enhance community care of those who require assistance with care and maintenance of the voice prosthesis. Results including patient and nursing satisfaction, along with implications for service delivery such as safety, adverse outcomes and cost effectiveness will be presented.

Conflict of Interest Declaration: None.

Abstracts (cont'd)

DYSPHAGIA IN HEAD AND NECK CANCER: EXAMINING THE IMPACT FROM THE PATIENTS' PERSPECTIVE

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Purpose: The current study adopts a patient centred, qualitative approach to examine the lived experience of dysphagia from the patients' perspective. It forms part of a larger project which will map issues across the domains of the World Health Organization's International Classification of Functioning, Disability, and Health (ICF), to inform optimal dysphagia assessment tools and establish future care models for dysphagic patients during the survivorship phase.

Methodology: Using purposeful, maximum variation sampling, a demographically diverse group of 26 participants who have undergone radiotherapy as part of their curative treatment for mucosal H&N cancer in the past 5 years were recruited. Each participated in an in-depth interview, detailing the full impact of dysphagia. Thematic analysis was utilised to identify key phrases and themes that emerged from the transcripts.

Results: The main themes identified were: 1) highly emotive responses to chronic dysphagia; 2) enforced personal and lifestyle changes; and 3) a need for enhanced health care services and support for patients with chronic dysphagia. Preliminary mapping across ICF domains confirms both activity and participation level deficits with strong influences of personal and environmental factors.

Conclusion: The data confirms the clinical belief that dysphagia has a negative and multi-faceted impact on the patient in the survivorship phase of care. New assessment tools are needed for long term monitoring of patients with dysphagia which encapsulate environmental and personal factors. Data also highlights the need for new models of long term support to help individuals adjust to changing physical states and to enhance psycho-social adjustment.

Conflict of Interest Declaration: No conflicts of interest to declare.

ORAL CAVITY AND OROPHARYNGEAL CANCERS IN NON SMOKERS - PRINCESS ALEXANDRA HOSPITAL 2001 - 2011

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888 patients presented to the MDT at the Princess Alexandra Hospital from 2001 - 2010. There were 413 oral cavity cancers and 346 oropharyngeal tumours. 129 cases were excluded because their exact sites of origin couldn't be determined because of late presentation of disease and approximately 10 of the tumours were not SCCs.

87 of the 413 oral cavity cances occurred in lifelong non smokers compared to 50 in 346 oropharyngeal cancers. Thus, 21% of our oral cavity cancers occurred in lifelong non smokers but only 14.5% of oropharyngeal lesions occurred in the lifelong non smokers. The smokers were approximately 61 years of age compared to 65 years of age of non smokers. Smoking induced cancers occurred 2.5 times more commonly in males than females that is expected. However they were 60% more common in females than males in non smokers.

There is a statistically significant difference (p<0.0001) in the sites of origin of the cancer of the mouth in non smokers compared to smokers and ex smokers. They occur on the edge of the tongue much more commonly in non smokers compared to other sites. This is very strong evidence tht recurrent dental trauma and consequent chronic irritation is a significant carcinogen for the production of mouth cancer, possibly in susceptible individuals and probably not associated with HPV although this requires further elucidation. At the moment in Queensland chronic dental trauma is a more significant carcinogen than HPV but that may change with time.

Conflict of Interest Declaration: I confirm that I have no conflict of interest with presenting this abstract.

ALOHA: A PILOT STUDY OF THE ASSESSMENT OF LYMPHOEDEMA OF HEAD AND NECK

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Princess Alexandra Hospital, Queensland

Purpose: Head and neck lymphoedema (HNL) is a troubling and persistent symptom for many patients following treatment for head and neck cancer. As more patients survive head and neck cancer due to improvements in treatment outcomes, HNL is anticipated



to become more prevalent. There is no clinically accessible valid and reliable assessment tool available to measure HNL. This limits accurate assessment and diagnosis of the condition and consequently there is limited evidence for the outcomes of HNL treatment. This study pilots the Assessment of Lymphoedema of Head and Neck (ALOHA). The ALOHA assessment comprises a system of three tape measurements applied with a uniform protocol. The pilot study will examine the clinical utility, validity and inter-rater reliability of the ALOHA.

Methodology: This study examined two groups of participants (n=20), one with HNL, and the other a control group. Participants were assessed using the ALOHA assessment at a single timepoint by three blinded therapists. Data was examined for reliability and validity using SPSS.

Results: All three measurements chosen showed acceptable inter-rater reliability. Two of the three measures were shown to detect the presence of lymphoedema in patients with diagnosed HNL in comparison to the community controls.

Conclusion: Whilst preliminary data is promising, the ALOHA requires additional research to determine its effectiveness within the head and neck cancer population. The next phase of the ALOHA trial aims to further develop this assessment.

Conflict of Interest Declaration: Nil declared.

DEVELOPMENT AND IMPLEMENTATION OF A LOCAL CONSENSUS STATEMENT FOR GASTROSTOMY TUBE INSERTION IN HEAD AND NECK CANCER PATIENTS

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Purpose: Enteral feeding via nasogastric or gastrostomy tube (G-tube) is required in greater than 50% of radically treated head and neck cancer patients. Criteria for G-tube insertion can be highly variable across hospital sites. This project aimed to: 1) map criteria for and timing of G-tube insertion across four hospital sites and 2) implement national head and neck evidence based guidelines (EBGs) through development and implementation of a consensus statement for G-tube insertion in this patient group.

Methodology: Audits were conducted pre and post statement implementation on the criteria for, and timing of G-tube insertion, weight and nutritional status throughout treatment for patients receiving chemoradiation/radiation alone +/- surgery at four different sites. Development of the consensus statement was informed by the EBGs, audit results, multidisciplinary team (MDT) input and consumers. MDT satisfaction with the statement was assessed via survey.

Results: Prior to the statement 71% of patients who met the criteria for a G-tube received one, which improved to 86% post implementation, with 100% planned for a G-tube (2 did not receive one for medical reasons). Timing of G-tube insertion improved from 34% receiving a G-tube prior to chemoradiation to 75% post-implementation. Small improvements were made in nutritional status post statement, including mean % weight loss. The MDT survey revealed all stakeholders were satisfied with the statement.

Conclusion: The consensus statement improved the appropriateness and timeliness of G-tube placement for head and neck cancer patients and guided consistent, evidence based practice across multiple hospital sites.

Conflict of Interest Declaration: Nothing to declare.



Abstracts (cont'd)

SENTINEL NODE BIOPSY IN HIGH RISK NON MELANOMA SKIN CANCER

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Introduction: Metastases from cutaneous squamous cell carcinomas (cSCC) occur 5% of cases, but in those patients cause significant morbidity and mortality. Certain clinicopathologic features are associated with metastasis. Sentinel Lymph Node Biopsy (SLNB) in high-risk cSCC patients may allow earlier detection of nodal metastasis and lead to improved outcomes.

Methods: Patients with high-risk cSCC of the Head & Neck were prospectively enrolled to the study. They received lymphoscintigraphic mapping of the sentinel nodes with 24hrs prior to surgery, wide local excision (WLE) of the tumour, and SLNB analysed with immunohistochemistry. Patients with evidence of micrometastasis received appropriate lymphadenectomy. Patients are followed for 5 years to monitor for local, regional and distant recurrence.

Results: Between 2010 & 2012, 47 patients were enrolled. 34 patients underwent SLNB at the time of tumour excision (21 primary cSCC, 13 recurrent cSCC) whilst the remainder (13 patients) underwent SLNB at the time of WLE. Many patients had multiple high-risk factors: 58% had lesions greater than 2cm in diameter, 29% were local recurrences, 22% were poorly differentiated SCC, 40% had perineural invasion, 4% had lymphovascular invasion and 14% of patients were immunocompromised. In two patients (4%) micrometastatic disease was found and in a further two (4%) macroscopic disease was found on exploration of the sentinel lymph node basin.

Conclusion: This is the largest reported series to date for SLNB in high-risk cSCC, showing an 8% rate of subclinical lymphatic metastasis. Further follow up will improve our ability to predict the risk factors associated with locoregional metastasis and survival. This series demonstrates the unique challenges of performing SLNB in cSCC compared to its use in cutaneous melanoma.

Conflict of Interest Declaration: None.

WHEN IS A PATIENT WITH HEAD AND NECK CARCINOMA "CURED: CONDITIONAL PROBABILITY OF SURVIVAL

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The Prince of Wales Cancer Centre, Randwick, New South Wales

Purpose: Many factors influence the likelihood of cure of a patient's defining Head & Neck Carcinoma. This review considers the time in follow-up since completing all treatments to help define when a patient can be regarded as "cured".

Methodology: Conditional probability of survival defines the likelihood of a patient surviving dependent upon reaching a specified time of follow-up. This Ethics SPSS (Statistical Package for the Social Sciences) approved Head & Neck Cancer database repository of information relates to all patients definitively treated at Prince of Wales Hospital. This information is grouped into patient disease, and treatment characteristics, with strong emphasis placed on clinical follow-up post treatment. Kaplan-Meir survival curves were generated for each disease subsite and grouped into 2 year intervals out to 10 years. Statistical evaluation was used to compare each time grouping and determine if survival prospects improved with time post treatment.

Results: All patients entered in to the Head and Neck Database undergo directed follow-up, endeavouring to capture all events that occur post treatment. Using the Oropharynx cancer population as a guide the cancerspecific survival at 1-year, 2-year and 5-year is 84%, 74% and 65% respectively. However the conditional probability of survival from the first cancer at 3-year is 79%, however having survived to 3-year it is 95% at 5-years, and 100% at 8 years. Similar figures apply to patients with Oral Cavity carcinoma.

Conclusion: Talking with Head & Neck patients about cure from their referred disease is realistic, and begins from about 3-year after referral.

Conflict of Interest Declaration: As with all material emanating from the Prince of Wales Cancer Centre Head & Neck Database, this is an SESLND Ethics approved study, Reference Number *HREC Ref: 10/040. There is no financial support or conflict of interest in preparing this abstract, and all contributing authors agree to their content and note there are no commercial affiliations or relationships that could be viewed as a potential conflict of interest.



WHAT ARE THE VOICE OUTCOMES FOLLOWING ENDOSCOPIC CARBON DIOXIDE (CO2) LASER EXCISION FOR EARLY GLOTTIC CARCINOMA? A DESCRIPTIVE STUDY USING HIGH-SPEED VIDEOLARYNGOSCOPY

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The typical voice profile of individuals following carbon dioxide (CO₂) endoscopic laser excision for early glottic carcinoma is unclear, making it difficult for the voice therapist to effectively manage postoperative care. To date, the use of High Speed Videolaryngoscopy (HSV) to assess the nature and extent of vocal cord impairment following laser resection has been limited to one known study. Voice recordings and rigid laryngoscopy were carried out on 15 males aged 59-83 years treated for Tis, T1a or T1b glottic carcinoma with CO2 laser surgery at Westmead Hospital Cancer Care Centre, Sydney. Mean length of time post surgery was 3.5 years. Patients were treated with a type II, III or IV resection. 6 participants had 1 resection only, 7 had 2 resections and 2 had 3 resections. All participants completed the FACT-G and Voice Activity Participation Profile (VAPP). Mean Maximum Phonation Time was 13.35 seconds. Mean Fo was 170.88Hz. Mean jitter (RAP) and shimmer was 0.45% and 6.08% respectively. Mean noise-toharmonic ratio was 0.09. At this stage in the analysis results are comparable to the majority of other early glottic cancer populations described in the literature. Tumour grade and/or number of resections do not appear to influence outcome. Mean total FACT-G and VAPP scores were 52.29 and 15.73. Regression analysis revealed time post surgery and number of resections did not predict quality of life or voice performance. Cepstral Peak Prominence will be reported for the first time in this population to analyse continuous speech samples. Preliminary high speed video analysis will also be described however no data was available at the time of abstract submission as analysis is ongoing. Findings will be discussed in regards to the role of the voice therapist in the management of this cancer population.

Conflict of Interest Declaration: This contribution is free of any conflict of interest.

THE PREDICTORS OF ADVERSE PAIN OUTCOME IN HEAD AND NECK CANCER PATIENTS

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Purpose: This study was to highlight the prevalence and severity of pain in patients with head and neck cancer (HNC) receiving cancer treatment, describe the interference with pain, evaluate the adequacy of pain management, and investigate the risk factors for pain.

Methodology: Patients attending a Head and Neck Oncology outpatient clinic and currently receiving anticancer treatment were recruited and interviewed. Pain and quality of life were assessed, using Brief Pain Inventory (BPI), LANSS pain scale, and EORTC H&N35. Statistical analyses were performed to investigate the risk factors for pain.

Results: The prevalence of pain in 25 eligible patients was 84% and the mean severity of pain was 5 ± 2.3 (0 to 10 scale). Of those patients with pain, 71% experienced severe (>7) or moderate (4 to 6) pain. Following expert opinions, 29% were identified with neuropathic pain mechanisms. The LANSS pain scale showed a sensitivity 80% and a specificity of 86%. The mean pain relief by medications was 56.3 ± 19.2 % (100% = completely effective). From statistical analyses nodal involvement showed statistically significant association with both pain prevalence (p = 0.05) and severity (p = 0.03) of pain.

Conclusions: This study has drawn attention to certain subgroups of patients who may be at risk of pain. Despite the use of analgesics, pain remains an issue in patients with HNC in our outpatient clinic. We suggest to screen for at-risk patients using validated clinical tools (e.g. BPI and LANSS) in early assessment, followed by the referral to a pain specialist.

Conflict of Interest Declaration: None.

Brisbane Convention & Exhibition Centre Brisbane, Australia

Abstracts (cont'd)

QUALITY OF LIFE IN METASTATIC CUTANEOUS SQUAMOUS CELL CARCINOMA OF THE HEAD AND NECK – THE WESTMEAD HOSPITAL EXPERIENCE

A. Y.-Y. Wang, C. Palme, J. T.-Y. Wang, G. Morgan, L. Perera, I. Kalnins, K. Tiver, V. Gebski, J. Gilchrist and M. Veness

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Purpose: The most common site for a nonmelanoma skin cancer is the sun-exposed head and neck (70-80%), especially in fair-skin populations (eg. Australia and United States).Nodal metastases develop in a minority (2-3%) of patients with cutaneous squamous cell carcinoma of the head and neck (HNSCC). Treatment for metastatic cutaneous HNSCC is usually multimodality and associated with morbidity. The aim of this study was to evaluate the impact that treatment has on the quality of life (QOL) of patients.

Methodology: A cross-sectional survey was distributed between February, 2011 and September 2011 to 42 patients with metastatic cutaneous HNSCC treated at the Head and Neck Cancer Service, Westmead Hospital, Sydney. Patients who were disease free, on active follow-up following curative intent treatment and had a minimum follow-up of 6 months since completion of treatment were included in the survey. QOL assessments were performed using 2 standardised QOL questionnaires: Functional Assessment of Cancer Therapy-Head and Neck (FACT-H&N) and Facial Disability Index (FDI).

Results: Female gender correlated with a significantly lower FDI physical function score (p = .017). Social alcohol consumption correlated with a statistically better social wellbeing score of FACT-General (FACT-G) (p = .016), FACT-G total score (p = .041), FACT-H&N total score (p = .033) and FDI physical function score (p = .034). In terms of head and neck symptoms, the top five complaints reported by patients were 'dry mouth', 'change in voice quality', 'unhappy with how my face and neck look', 'unable to eat food that I like' and 'pain in mouth, throat or neck'.

Conclusions: Female gender predicts worse QOL while social/moderate alcohol consumption is a predictor of improved QOL. The most common symptom was xerostomia.

Conflict of Interest Declaration: There is no conflict of interest to declare.

EARLY ACUTE DYSPHAGIA DURING RADIATION AND CHEMORADIATION TREATMENT: IMPLICATIONS FOR ACUTE CARE SERVICES

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Purpose: The majority of patients with mucosal head and neck cancer treated by Radiotherapy (RT) or Chemoradiotherapy (CRT) will experience swallowing difficulties during and immediately after RT and CRT. Emerging research suggests that multidisciplinary support and diet modification early in the course of treatment is beneficial. Hence it is important that more detailed information is available about the extent and potential severity of dysphagia during the acute early days of treatment in order to assist patients and the multidisciplinary team manage these consequences appropriately.

Methodology: The current study describes the functional swallowing status recorded in a prospective clinical cohort of 87 patients who received XRT alone and 144 who received CRT alone from initial presentation and at weekly intervals over the period of treatment.

Results: A total of 21% of XRT and 37% of CRT had a pre-existing dysphagia at presentation. During treatment, significantly more individuals in the CRT group experienced dysphagia (CRT:96%, XRT:69%), and there was a significantly higher proportion of severe dysphagia in the CRT group (57%) compared to XRT (14%), and significantly more alternate feeding required (76% CRT, 16% XRT). For most individuals in the XRT group dysphagia severity peaked by week 3, in CRT group this was weeks 4-6.

Conclusion: With the ever increasing demands placed on speech pathology services pre-treatment and during treatment, the current evidence provides clinical data to better inform prioritisation of services as well as and help to formulate prognostic information for new patients.

Conflict of Interest Declaration: All authors have no conflicts of interest to declare.



DYSPHAGIA AND NUTRITIONAL MANAGEMENT PRACTICES: SURVEY DATA FROM AUSTRALIAN AND NEW ZEALAND MULTIDISCIPLINARY TEAMS

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Purpose: Recent surveys of practice within the UK and USA have highlighted a high degree of practice variability, particularly in relation to the nature of dysphagia management services offered pre, during and post treatment. The current survey was designed to provide a snap shot of Australian and New Zealand practice patterns for comparison with other international data.

Methodology: A survey was distributed via a secure online website to a total of 32 multidisciplinary teams within Australia and New Zealand. It consisted of the 22 questions which related to speech pathology and dietetic management practices before, during and after H&N cancer management. The questions in the survey followed either a multichoice or dichotomous format and openended questions.

Results: Survey responses were obtained from over 75% of the MDTs. Levels of staffing mainly fell between 0.5 – 1FTE for both speech pathology and dietetics. Very few teams had dedicated nursing staff care to support enterally fed patients. Half to two thirds of all patients are seen by speech pathology and also dietetics pre treatment. Almost 60% receive prophylactic swallowing exercises. Under half reported having a prophylactic PEG protocol and 100% encourage oral intake for as long as possible in all patients. Over 80% offer routine regular review for patients post treatment.

Conclusion: Practice patterns aligned more closely to recent data reported from the UK than those of the USA. Clinical practices are also more consistent with emerging evidence supporting prophylactic dysphagia management and maintaining oral intake for as long as possible during treatment.

THE CAREGIVERS' PERSPECTIVE ON THE IMPACT OF DYSPHAGIA FOLLOWING HEAD AND NECK CANCER

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Purpose: Caregivers provide support to H&N cancer survivors with dysphagia who receive definitive radiotherapy as part of their curative treatment, yet our understanding of the impact on caregivers is limited. This qualitative design study aimed to describe the caregivers' experiences of living with someone with dysphagia and identify their coping strategies.

Methodology: A purposeful, maximum variation sampling technique was adopted to recruit 17 caregivers of patients treated curatively for H&N cancer in the last five years. Each participated in an in-depth interview, detailing their experiences of living with someone with dysphagia and the associated impact on their life. Thematic analysis was adopted to search the transcripts for key phases and themes that emerged from the discussions.

Results: The main themes identified were: 1) highly emotive responses to caring for a patient with chronic dysphagia; 2) considerable adjustments to the caregivers' lifestyles; and 3) and a desire for changing models of healthcare to further include the caregiver in the management of the patient. Caregivers generally felt ill prepared for the role they would take on in the management of the patient's dysphagia.

Conclusion: The caregivers in the study experienced a wide range of effects as a result of the patient's dysphagia. This data supports the importance of including caregivers in the management of patients with dysphagia. It also recognises the need for a caregiver specific assessment tool to adequately monitor the impact of dysphagia experienced by the caregiver to identify those requiring further support.

Conflict of Interest Declaration: No conflicts of interest to declare.

Abstracts (cont'd)

THE GENOMIC EXPRESSION OF CUTANEOUS SQUAMOUS CELL CARCINOMA OF THE HEAD AND NECK WITH PERINEURAL INVASION

T. Warren, G. Boyle, I. Brown, F. Tang, B. Wallwork and B. Panizza

Skin cancer is diagnosed in Australia at epidemic rates and the head and neck is the most common site of disease. Perineural invasion (PNI) is associated with a worse prognosis, and is seen most often in cutaneous squamous cell carcinoma of the head and neck (CSCCHN).

Clinical PNI describes radiological or clinical evidence of PNI (i.e. facial paralysis or trigeminal nerve distribution numbness, paraesthesia, formication or pain). This signifies cranial nerve involvement and imparts a worse prognosis when compared to microscopic PNI, which is only noted incidentally on histopathology. In some series, five-year overall survival rates for clinical PNI are 20-30%.

The mechanism of PNI remains unknown. In vitro tissue and cell studies suggest neurotrophic factors in the tumour microenvironment stimulate the interaction of tumour cells and peripheral nerve fibres.¹ However, global expression differences have never been assessed.

This study investigated the genomic expression profile of CSCCHN with PNI compared to CSCCHN with no PNI, to identify a biomarker for PNI that may signify a high-risk state. RNA was extracted and purified from formalin-fixed paraffin-embedded tissue blocks. RNA with sufficient quantity and quality was subject to whole genome expression profiling analysis (~48,000 genes, Illumina). Over 5,000 genes were identified as having a significantly different expression pattern between study groups. Validation of ten key genes is underway.

^{1.} Ayala et al. In vitro dorsal root ganglia and human prostate cell line interaction: redefining perineural invasion in prostate cancer. Prostate. 2001; 49:213-223.

I AM MORE THAN MY CANCER - MY STORY MATTERS

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Purpose: This paper explores what the healthcare team can do to enhance the dignity of the patient and reduce the existential distress many patients experience. As captured by the late Anatole Broyard "my illness is a routine incident in [my doctor's] rounds while for me it's the crisis of my life" ¹. It is well recognised that quality of life issues are important issues for our patients. An innovative psychotherapeutic model "Dignity Therapy" pioneered by Dr Harvey Chochinov has been shown to be an effective intervention to enhance the dignity and sense of self worth of palliative patients. This paper will review the potential for adapting this intervention for this population with the goal being to reduce the psycho social distress experienced by this patient group.

Methodology: A qualitative review via case examples of head and neck patients. Their stories are captured using an evidence-based therapeutic model.

Results: On review of the literature on evidence-based models, adapting the Dignity Therapy model can be seen as a valuable therapeutic intervention for this population and has great potential to enhance the healthcare team's appreciation of the experience of being a patient, their value and self-worth as opposed to simply focussing on the cancer.

Conclusions: Results of this project present a research opportunity to formalise a model of care for our patients, endeavouring to bring to the attention of the healthcare team the importance of dignity and respect in the care of our patients.

^{1.} Chochinov. Dignity and the essence of medicine: the A, B, C, and D of dignity conserving care. BMJ 2007; 335:184

Conflict of Interest Declaration: I, Rowanne Wright, declare that this presentation is free of any conflict of interest.

Poster Abstracts



Poster Abstracts

DOES SQUAMOUS CELL CARCINOMA INVOLVING THE MAXILLA FROM SINO-NASAL SITES HAVE A WORSE PROGNOSIS THAN ORAL SQUAMOUS CELL CARCINOMA INVOLVING THE MAXILLA?

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Background: Squamous cell carcinoma (SCC) of mucosal origin may involve the maxilla from either oral or sino-nasal primary sites. It has been suggested that tumours arising in the sinus have a worse prognosis than other maxillary tumours.

Aim: To identify factors affecting the prognosis of SCC affecting the maxilla from either oral or sino-nasal origin and to determine if non oral primary site conferred a worse prognosis.

Methods: A retrospective review of patients treated at the Royal Melbourne Hospital Multidisciplinary Head and Neck Oncology clinic between 1990 and 2005 was conducted. Sixty three patients with SCC involving the maxilla were indentified for inclusion in the study however complete records were available for only 58 of these patients to be included in the analysis. Data collected included: age at time of resection, gender, TNM stage, smoking and alcohol history, site of involvement, surgical margin status, presence of perineural/ lymphovascular invasion, adjuvant therapy, survival and time to locoregional recurrence.

Results: Overall 5 year disease-free survival was 42%. Factors found to be statistically significant in adversely affecting survival on multivariate analysis (Cox proportional hazards model) were: advanced T-stage at time of resection (RR=2.91, p=0.001, Cl 1.5-5.6) and positive histological margins following resection (RR=2.57, p=0.039, Cl 1.1-7.3). Site of origin of maxillary tumour (oral vs non-oral) was not found to be an independent risk factor for survival using multivariate analysis.

Conclusion: Sino-nasal origin of SCC involving the maxilla was not in of itself a negative prognostic factor. However, such tumours are frequently detected at a more advanced stage and more prone to incomplete resection and these factors were found to be associated with worse outcomes.

Conflict of Interest Declaration: None to declare.

RETROSPECTIVE AUDIT OF HEAD AND NECK CANCER PATIENTS TREATED WITH 3-DIMENSIONAL CONFORMATIONAL RADIOTHERAPY AT THE CALVARY MATER HOSPITAL

Brisbane Convention & Exhibition Centre

Brisbane, Australia

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Calvary Mater Hospital, New South Wales

Purpose: To perform a local audit of all patients treated at the Calvary Mater Hospital with 3-Dimensional Conformational Radiotherapy (3DCRT) for head and neck cancer. The audit aims to assess morbidity and mortality associated with treatment including relapse and local complications.

Methods and Materials: A retrospective audit of patient files was performed which included initial assessment and dosage data as well and clinic notes with regards to ongoing follow up. All diagnoses were histologically confirmed. Note was taken of any side effects significant enough to be noted in a review subjectively (eg. xerostomia, dysphagia) as well as objective end points (relapse, length of follow up, death etc). Dysphagia was assessed using the LENT-SOMA scale based on information gained from the review notes. Xerostomia was also assessed but simply judged as being present or not if recorded in the patient notes as it was too difficult to attribute a degree to it.

Results: A total of 152 patient's files were reviewed. Patients received an average of 65.7Gy in an average of 32.7 fractions. A total of 28% of patients relapsed, local relapse 7.8%, regional 11.8%, and distant relapse 9.2%, 10.5% patients died from their disease. Analysis showed the predominant site for origin of the lesions was the oropharynx. Xerostomia as described in 36.8% of people at follow up.

Conclusion: Our results are in line with current literature for morbidity and mortality rates using 3DCRT as a treatment modality for head and neck cancer.

Conflict of Interest Declaration: Nil.



HPV ASSOCIATED OROPHARYNGEAL CANCER IN PREGNANCY: DIAGNOSTIC AND MANAGEMENT CHALLENGE

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Purpose: Human papilloma virus (HPV) associated head and neck cancer continues to rise in prevalence causing significant disease burden to previously healthy, young individuals. We describe the first case to our knowledge of HPV + oropharyngeal cancer arising in a young pregnant woman.

Material and Methods: We discuss the complications of pregnancy on limiting management and treatment options and the need for timely multidisciplinary input. Staging workup involving computed tomography (CT) should be avoided in pregnancy and positron emission tomography (PET) is contraindicated. Similarly MR can be performed as only relatively safe modality but gadolinium is avoided, this makes the study suboptimal in assessment of nodes. HPV+ nodes are large cystic and usually demonstrate smooth rim enhancement. Usual chemoradiotherapy regimes are associated with significant toxicity and detrimental to foetus.

Results: Our patient presented at thirty-one weeks into her pregnancy with a right neck lymphadenopathy increasing in size over a two-week period. Clinical examination and 1.5T MRI without contrast revealed a right tonsillar primary. Histology confirmed p-16+ squamous cell carcinoma. Large cystic 3cms plus node was seen on MRI. A multidisciplinary decision with obstetric input was made to induce labour at thirty-four weeks gestation so that CT, PET scan could be performed for accurate staging.

Conclusion: As the prevalence of head and neck HPV SCC continues to rise, we are likely to see more women presenting during pregnancy. This poses a diagnostic and management challenge. This particular case illustrates need for approved management guidelines in such challenging clinical scenario.

Conflict of Interest Declaration: Authors declare no conflict of interest.

ONE STAGE NASOLABIAL FLAP RECONSTRUCTION FOR HEMI-NASAL DEFECTS AFTER SKIN CANCER EXCISION: A DIFFERENT APPROACH

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The nasolabial flap is one of the workhorse flaps for reconstruction of defects involving the nose, particularly the alar subunit. Based on the lateral nasal artery perforator, it can be used as a rotation, transposition, or advancement flap. For heminasal reconstruction a second stage is often required for definitive inset and cartilage grafts. Alar retraction is a common long-term complication. Multi-stage forehead flap reconstruction is the mainstay for these defects. We describe using a single stage superiorly based nasolabial flap with cartilage grafts to the alar rim and internal valve for this defect. Our initial patient was an 88 year old lady with a Left sided hemi-nasal resection for full thickness alar BCC extending up the lateral nasal wall. She had been planned for multi-stage forehead flap reconstruction but had multiple comorbidites rendering her a high anaesthetic risk. A superiorly based Nasolabial flap was raised and transposed medially to attach to the medial side of the defect. The distal part of the flap was then turned in for mucosal lining. Conchal cartilage was harvested from the left ear and utilised for the alar rim and internal valve. The grafts were secured to the dorsal nasal cartilage medially and the piriform aperture laterally. Follow up at 1 week, 6 weeks and 12 months showed preserved alar curvature and satisfactory overall cosmesis. We recommend this approach for appropriate patients with heminasal defects as an alternative to the forehead flap or other multi-stage reconstructions.

Conflict of Interest Declaration: No conflict of interest to declare.

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Poster Abstracts (cont'd)

MULTIDISCIPLINARY DISCUSSION RESULTS IN A CHANGE IN MANAGEMENT STRATEGY FOR PATIENTS WITH HEAD AND NECK MALIGNANCIES

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Objectives: The aim of this study was to review the impact of the multidisciplinary team (MDT) forum on the management of patients with head and neck malignancies and to assess what factors influence those changes.

Methods: All management decisions regarding H&N cancer patients treated at the Sydney Head and Neck Cancer Institute were recorded prospectively from December 2011 to June 2012 and kept in a database. The patient management plan before the MDT (as proposed by the referring doctor) was compared to the final plan following the MDT discussion. Changes were classified as minor changes (alteration of management plan detail within the same treatment modality) or major changes (resulting in a change to the primary treatment modality).

Results: Over a seven month period (December 2011 until June 2012) our MDT has reviewed 119 patients with head and neck malignancies. A full spectrum of head and neck malignancies were represented with skin (21%), oral cavity (21%), nasal cavity & sinus (15%) oropharynx / hypopharynx / larynx (28%) and salivary gland (9%) cancers comprising the majority of cases. The management plan was altered by the MDT forum in 33 patients (27%). Of those, 19 were minor changes (alteration of management plan detail within the same treatment modality) whilst 14 were major changes resulting in a change to the primary treatment modality. Tumour site did not significantly alter the likelihood of a decision being altered.

Conclusion: Discussion of challenging cancer cases within an MDT forum may have a beneficial effect on the management of patient care and offers opportunity for patients to benefit from a wide experience and knowledge base. Particular cases benefitting from such interaction are discussed.

Conflict of Interest Declaration: The authors have no conflict of interest to declare.

OBJECTIVELY ASSESSING VASCULARIZED OSSEOUS FLAPS OF THE HEAD AND NECK: A NOVEL APPROACH UTILIZING INTRAOPERATIVE FLUORESCENT ANGIOGRAPHY

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Introduction: Unique 3-dimensional post-traumatic and oncologic-related defects of the head and neck can necessitate vascularized osseous flaps. These flaps often require technically challenging osteotomies with potential tenuous perfusion patterns to the osseous segment(s). Routine use of intraoperative fluorescent angiography with indocyanine green (ICG) has been advocated as a reliably objective tool for assessing soft tissue and vascular perfusion. At our respective institutions, we have further used this device with success in assessment of vascularized osseous flaps.

Methods: A retrospective review of all reconstruction cases utilizing osseous-based flaps for reconstruction of segmental and/or composite type defects was performed. Cases utilizing fluorescent angiography for intraoperative osseous flap assessment were further analyzed for evaluation of osseous flap perfusion.

Results: A consecutive case series of 10 osseous-based free tissue transfers were performed. All flaps were successful with no total or partial flap losses encountered. The flaps consisted of 8 fibula flaps and 2 chimeric scapular bone flaps. All flaps were evaluated by intraoperative angiography and revealed osseous perfusion via both periosteal and endosteal blood supplies.

Conclusions: Adoption of intraoperative fluorescent angiography has been a valuable tool to objectively evaluate flap perfusion prior to and after flap inset and pedicle evaluation prior to division and after reanastomosis. Our group has extrapolated the useful benefits of this tool to more critically and objectively assess vascularized bone flaps and the vascularity of critical bone defects in an effort to improve reconstruction outcomes.

Conflict of Interest Declaration: There are no conflicts or interests to disclose.



HYPOFRACTIONATED RADIATION THERAPY FOR PALLIATIVE HEAD AND NECK CANCER: A REGIONAL HOSPITAL PERSPECTIVE

L. Jackson and M. Collins

Introduction: Head and neck cancer patients, particularly those from rural and remote areas, often present with Stage III or IV disease. Radical treatments may not be appropriate due to locally advanced or distant metastatic disease, leaving patients with palliative options only. One such treatment is hypofractionated radiation therapy, 36Gy in 6 fractions, as was used in the Princess Alexandra Hospital "Hypo Trial". This retrospective chart analysis was undertaken to assess patient outcomes in a regional cancer centre.

Methods: From 2007 to 2012, patients who were prescribed 36Gy in 6 fractions were identified. Data regarding patient's diagnosis, age, gender, stage, rurality, Indigenous status, initial symptoms and follow up was gathered from our electronic medical record database, MOSAIQ. Patients were included if they had a diagnosis of a head and neck malignancy, including primary skin cancers and those with nodal metastases of unknown primary (presumed skin), who received 36Gy in 6 fractions over 2 or 3 weeks.

Results: 66 patients were included in this analysis. 3 patients received only a single fraction, whilst 4 received 30Gy and missed the final fraction. 24 patients were female and 42 male, and the average age was 73.1years. 72% of the patients were from areas outside of Townsville. The most common diagnosis was oropharyngeal cancers (24.5%) with presumed skin primary and larynx the next most common (18% each). The treatment was well tolerated in the patients that completed the course. Over 50% of the cohort survived longer than 6 months, with a 13% survival rate in the non-metastatic patients at 54 months. There was an objective response rate of 72% at initial follow up, (44% of patients achieved a complete clinical response).

Discussion: The results of the chart analysis are comparable with the results of the Hypo Trial. The data supports the use of 36Gy in 6 fractions in the palliative setting, as it is well tolerated, has an objective response rate with a small chance of cure.

INSERTION OF THE PROVOX VEGA VOICE PROSTHESIS AT THE TIME OF LARYNGECTOMY SURGERY

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Objective: The PAH Speech Pathology Department, in conjunction with the Department of Otolaryngology, has embarked on a new clinical practice in relation to voice prosthesis insertion post-laryngectomy. Voice prosthesis insertion at the time of laryngectomy surgery has been standard practice throughout Europe and South America for over 20 years, with improved clinical results reported (Op de Coul et al, 2000; Manni et al 1984; Leder and Sasaki, 1995; Bozec et al 2010). In Australia, voice prostheses have traditionally been inserted 7-10 days post-primary tracheoesophageal puncture. The PAH has been trialling the insertion of the Provox Vega 17 Fr 8mm voice prosthesis at the time of laryngectomy surgery. Clinical data has been collected and analysed in relation to clinical care, length of stay and clinical costings. Initial results support this change in practice with improved clinical care and costing outcomes.

Method: All patients planned for total laryngectomoy or pharyngolaryngectomy with primary TEP were included in this study. A 17Fr 8mm Provox Vega Indwelling Voice Prosthesis was chosen and inserted at time of surgery using trocar and pharyngeal protector. The clinical and non clinical information relating to inpatient length of stay, post surgical complications and device related complications ie: leakage around the voice prosthesis, embedding of the voice prosthesis, initial device life and in clinical costings relating to voice prosthesis management across the continuum was collated.

Participants: From March 2010 until June 2012, 24 patients (22 Males and 2 Females) have undergone laryngectomy surgery at the PAH – 13 total laryngectomy and 11 pharyngolaryngectomy. Twenty two patients received a voice prosthesis at the time of surgery and data from these patients was included in this retrospective chart audit.

Results: Preliminary analysis of the results of the initial cohort reflect good outcomes in patient care and clinical costs. Of the 22 patients who received a voice prosthesis at the time of surgery, the 17Fr 8mm was a universally appropriate size. Complications relating to sizing were noted in only 1 case where the prosthesis became embedded. This was an acute incident that resolved without needing to remove the prosthesis. There were no complications relating to leakage around the device.

Poster Abstracts (cont'd)

Initial device life corresponded well with international literature. Costs were noted to be reduced by \$100-\$200/ patient. Initial analysis indicates that length of stay was not increased due to the insertion at the time of surgery.

Conclusions: Initial results from the analysis of data relating to the insertion of the Provox Vega 17Fr 8mm voice prosthesis at the time of laryngectomy surgery support the continuation of this practice. The clinical and cost outcomes for this cohort were no worse than previous practice with improved outcomes noted in clinical care, education and cost. Ongoing research is warranted with expansion of the database to include information on patient satisfaction and empowerment. Ongoing collection and analysis of information through formal research will support formalisation of this clinical practice and promotion of it nationally as best practice, in line with international standards.

NEOADJUVANT CHEMOTHERAPY IN ADVANCED HYPOPHARYNGEAL CARCINOMAS

P. Joshi, V. Noronha, **A. Joshi**, D. Chaukar, P. Pai, P. Chaturvedi, J. P. Agrawal, S. Ghosh, A. Budrukkar, A. K.Dcruz and K. Prabhash

Tata Memorial Hospital, Mumbai, India

Purpose: The aim of this retrospective study was to find out the role of neoadjuvant chemotherapy(NACT) in changing the management and outcome of advanced hypopharyngeal carcinoma patients.

Methodology: This is a retrospective analysis of 59 treatment naïve, advanced hypopharyngeal cancer patients presenting to Tata Memorial Hospital, Mumbai from April 2010 to October 2011. NACT was given as two drug(platinum with taxane) or three drug with (platinum, taxane with 5-Flurouracil) as 3 weekly regimen with Cisplatin and Docetaxel as 75 mg/m2 each and 5-Flurouracil as 750 mg/m2. NACT was either given with the intent of achieving • Surgical resection (Extensive soft tissue disease, oropharyngeal involvement, extensive disease with cartilage erosion) or • Organ preservation (Bulky disease with inner cartilage erosion, exolaryngeal disease without cartilage erosion, large N3 nodes or nodes with restricted mobility).

Results: The mean age of this population was 55 years. Most (83%)of the patients had Pyriform sinus involvement. 69% patients had Stage IVa disease, 21% Stage IVb and 10% Stage III. The overall response rate was 76%, including 08% complete responses (CR) and 68% partial responses. Following NACT, resectability was achieved in 21%(7/33) and organ preservation protocol was planned after NACT in 86% (19/22)patients and 4 patients denied further treatment. The main toxicities(grade 3, 4) were neutropenia 04%,febrile neutropenia 4%, mucositis 5%, diarrhea 5%. The median progression free survival was 52 weeks. **Conclusions**: NACT is helpful in achieving surgical resection in patients of advanced hypopharyngeal cancer with oropharyngeal involvement and larynx preservation in patients with bulky disease/bulky disease with inner cartilage erosion.

Conflict of Interest Declaration: None.

IMMEDIATE STATIC REANIMATION WITH FASCIA LATA SLINGS AND PERIORBITAL PROCEDURES FOR RADICAL PAROTIDECTOMY

A. Karunairajah

Gold Coast Hospital, Queensland

Introduction: The impact of facial nerve dysfunction and the disability following radical parotidectomy can be dramatic and disfiguring. At rest significant ptosis of the eyebrows, eyelids, cheek and mouth occurs. The majority of patients undergoing this surgery are elderly and poor candidates for dynamic reconstruction because of advanced age, pre existing morbidities, poor prognosis and debilitation. Furthermore they usually require radiotherapy, and delayed reconstruction entails high risk when raising a facelift plane.

Method: The goal of immediate static reanimation is restoration of facial symmetry at rest with multidirectional fascial slings and preventing complications such as corneal exposure and ulceration by lateral tarsorrhaphy with or without lateral canthopexy as required. Direct brow lift for brow ptosis can be done immediately with satisfactory results.

Results: The brow lift prevents brow ptosis, canthoplasty & tarsoraphy prevents ectropion and gold weight in the upper eyelid can rectify lagophthalmos. Fascial slings to alar groove prevents alar collapse & nasal obstruction from dilator nares paralysis and to the upper lip, commissure & lower lip prevents speech impediment and oral incontinence. Furthermore, the psychosocial sequelae of facial paralysis are far reduced. We show results of immediate static reanimation with satisafactory restoration of facial symmetry and reduction of ocular sequelae.

Conclusion: We recommend immediate static reanimation in radical parotidectomy for improved function and form in these difficult patients who often wait for long periods before reconstruction with attendant complications.

Conflict of Interest Declaration: None declared.



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* Please note changes in Product Information.

References: 1. Erbitux Product Information. Date of last amendment: 1 September 2011 2. Gregoire, V. et al, On behalf of the EHNS–ESMO–ESTRO Guidelines Working Group. Ann of Oncol. 2010; 45 (Suppl 5): v184–v186. 3. National Comprehensive Cancer Network Clinical Guidelines in Oncology (Head and Neck Cancers), V.1.2012, www.nccn.org.

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Poster Abstracts (cont'd)

LIPOBLASTOMA- AN INTERESTING DIFFERENTIAL OF PAEDIATRIC LIPOMA

R. Lim, S. Flatman, A. Longano and E. Sigston

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Lipoblastoma is a rare, rapidly growing, benign tumour derived from embryonal white fat that is often found in the trunk and extremities but can affect the head and neck. They typically occur in children less than three years of age and follow a benign clinical course, although they can recur. Lipoblastoma refers to the well-encapsulated variety containing more myxoid stroma with peripheral infiltration and distribution throughout all the tissue layers. The more diffuse and infiltrative tumour type, lipoblastomatosis, is distributed in the deep layer and is more likely to recur after surgery. The related hibernomas are gray-brown, lobulated tumours arising from brown fat. Histological examination showing nuclear atypia is required for a diagnosis of liposarcoma, a malignant tumour derived from fat cells, although these are more common in adults and involve the trunk, retroperitoneum or extremities.

We illustrate a case involving a 12 month old boy referred for a large right sided neck lump that was consistent with a lipoma. Magnetic resonance imaging supported the diagnosis, revealing a large lobular mass deep to sternocleidomastoid in the right side of the neck, with fatty signal and enhancing septa passing throughout. After discussion at a multidisciplinary meeting the patient underwent surgery. A well encapsulated lipomatous tumour was removed and histopatholgy revealed a wellcircumscribed lesion divided into lobules containing a mixture of fat cells of varying maturity, divided by bands of fibrous tissue and skeletal muscle, and regions of myxoid stroma. A diagnosis of lipoblastoma was made and there was no adjuvant treatment given.

PARANASAL ADENOCARCINOMA: A 15 YEAR PROSPECTIVE AT THE ROYAL BRISBANE AND WOMEN'S HOSPITAL

N. Lintern, R. Hodge and J. Earnshaw

Royal Brisbane and Women's Hospital, Queensland

Purpose: Para nasal adenocarcinoma are a rare malignancy in the western world, which account for just 3% of all head and neck malignancies and less than 1% of all malignancies¹. Currently the mainstay of treatment is surgical resection and radiation therapy. Patients diagnosed with high-grade adenocarcinoma have a five year survival rate of 20%. Research perform by Knegt have showed increased survival in conjunction with topical 5-FU, with 5 year survival shown to be improved to 87%. This study also showed only 1.6% of patients suffered serious complications². Over the past 15 years patients presenting to the Royal Brisbane and Women's Hospital Head and Neck Clinic (RBWH HNC) with paranasal adenocarcinoma have undertaken topical 5-Fluorouracil with surgical resection prior

Aim: Compare outcomes of patients with adenocarcinoma treated with surgery, surgical resection and topical 5-FU and surgical resection and postoperative radiation.

Methodology: Retrospective Chart Audit of all patients presenting to the RBWH Head and Neck Clinic from 1997 to 2012 with paranasal adenocarcinoma.

Preliminary Results: In the past 15 years 26 patients have presented to the RBWH HNC with Paranasal Adenocarcinoma. Of the analysis that has occurred 40 % underwent surgical resection with topical 5-FU, 25 % with surgical resection and postoperative XRT and 30 % with one modality of treatment. 5% of patients were un resectable and were for palliative treatment at presentation. Following treatment there was a 40% recurrence rate with equal percentage through all treatment groups.

References:

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Conflict of Interest Declaration: Nil conflict of interest.



HOW TO BUILD A MULTIDISCIPLINARY ROBOTIC TEAM IN A COMPREHENSIVE CANCER CENTRE? THE UNIVERSITY OF HAMBURG EXPERIENCE

B. B. Lorincz, F. Chun and J. Dowaji

University Medical Center Hamburg-Eppendorf, Dept. of ENT-Head & Neck Surgery, Hamburg, Germany

Purpose: Robotic surgery is well established in urology and in gynecology, and is increasingly gaining field in H&N surgery. By building a multidisciplinary robotic unit at the University of Hamburg, our purpose was to maximize patient benefits due to a better allocation of existing resources.

Methods: Single-institution, multi-departmental project in a comprehensive cancer center, serving the population of Hamburg (2 million) and metropolitan area (6 million). The clinical plans from each participating department were acquired and streamlined, as well as communication channels among the various, weekly held multidisciplinary tumour board meetings were established. A questionnairebased market research has also been conducted among our thyroid patients, in order to predict the potential demand for robotic thyroid surgery.

Results: While it is desirable to include as many surgical departments into a multidisciplinary robotic programme as possible, once the robotic slots are fully scheduled, synchronising the units requires a great deal of coordination. Given the malignant nature of these conditions, keeping the waiting lists short is of utmost importance. In order to keep the additional costs per case and the maintenance fees as low as possible, daVinci EndoWrist-Instrument orders, EndoWrist-sterilization procedures and service schedules have been reviewed, synchronised and interdisciplinary standardized where possible.

Conclusion: We have successfully converted a single speciality (urology) robotic unit into a multdisciplinary robotic center covering urology, gynecology and H&N surgery. Our expansion is now heading towards incorporating transaxillary robotic thyroid surgery into our H&N portfolio, and to invite our maxillofacial colleagues to take part in our well established programme.

Conflict of Interest Declaration: Disclosure statement -Dr Lorincz works as an official daVinci-proctor and as such, does lecturing and TORS-training for Intuitive Surgical, Inc.

UTILITY OF ANTI-FIBRINOLYTIC AGENT IN NON-ARTERIAL BLEED AMONG PATIENTS WITH MALIGNANCY WITHIN NASOPHARYNX – 2 CASE REPORTS

T.H. Low, J. Huang and J. Clark

Royal Prince Alfred Hospital, Camperdown, New South Wales

Tranexamic acid is a synthetic derivative of the amino acid lysine. It irreversibly binds and blocks the lysinebinding sites on plasminogen molecules; hence inhibiting plasminogen activator and preventing fibrinolysis. We report two cases where tranexamic acid (1gm PO QID) were administered to two patients with malignancy within the nasopharynx.

Patient FM is a 87yo gentleman with T4N0M0 nasopharyngeal carcinoma who presented with symptomatic epistaxis requiring frequent nasal packing to control the bleeding. He represented with another episode of epistaxis at the commencement of this radiotherapy treatment, requiring nasal packing. Tranexamic acid was commenced and nasal packing was removed successfully. He was able to complete to his radiotherapy treatment without further bleeding or need for nasal packing.

Patient GK is a 69yo gentlemen with a vascular lesion (subsequent biopsy confirms haemagiopericytoma) arising from posterior right lateral nasal wall, extending into the nasopharynx who presented with frequent epistaxis. He was commenced on tranexamic acid whilst undergoing investigation for definitive treatment. Since starting tranexamic acid, he has not presented with further bleeding (over a period of four weeks).

These two cases illustrate the utility of tranexamic acid in controlling non-arterial bleeding among patients with nasopharyngeal tumours. It is inexpensive and has minimal side effects. It has also been shown to be effective in treating bleeding in the setting of trauma, cardiac surgery, orthopaedic surgery and menorrhagia. Tranexamic acid should be considered in selected patients as a temporising measure to control symptomatic non-arterial bleed from tumour arising from the upper aerodigestive tract.

Conflict of Interest Declaration: None.

Poster Abstracts (cont'd)

T4 ORAL TONGUE CANCER – SURGERY OR CHEMORADIOTHERAPY?

L.J. McDowell, A. Herschtal, S. Kleid and J. Corry

Peter MacCallum Cancer Centre, Victoria

Purpose: To investigate the clinical belief that patients with T4 SCC of the oral tongue have better disease control but poorer functional outcomes when treated surgically as compared to chemoradiotherapy.

Methodology: All patients with T4 SCC oral tongue treated with radical intent at PMCC from 1999 to 2010 were included in this retrospective review. The primary endpoints were patterns of relapse (LRC, PFS, OS) and functional outcomes (speech and swallowing). The cohort was analysed both as a whole and by treatment modality (surgery or chemoradiotherapy).

Results: There were 31 patients. Median age 63 years (range 21-83), M:F was 21:10, nodal stage N0 (32%), N1 (13%), N2(55%). 20 patients were treated surgically (near total or total glossectomy 35%, but none required total laryngectomy) and 11 patients were treated with chemoradiotherapy. All patients in the CRT group were assessed as inoperable or had refused surgery and all were T4 on the basis of extrinsic muscle invasion not bone invasion. The 2 and 5 year OS rates were 58% and 32% for the entire cohort. There were no significant differences between the surgical versus chemoradiotherapy groups with respect to LRC (56 vs 62%), PFS (56 vs 55%) nor OS (38 vs 55%) at three years. Functional outcomes in both groups were too poorly documented for analysis.

Conclusions: Primary chemoradiotherapy may be a valid treatment option for patients with T4 SCC oral tongue. Better assessment and documentation of functional outcomes is required.

Conflict of Interest Declaration: Nil.

FACIAL LYMPHOEDEMA FOLLOWING TREATMENT FOR HEAD AND NECK CANCER: IMPACT ON PATIENTS, AND BELIEFS OF HEALTH PROFESSIONALS

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A. C. McGarvey $^{1,\,2},\,P.$ G. Osmotherly $^{2},\,G.$ R. Hoffman 3 and P. E. Chiarelli 2

¹Physiotherapy Department, Calvary Mater Newcastle Hospital, New South Wales ²Faculty of Health Sciences, University of Newcastle, New South Wales ³Maxillofacial Department, John Hunter Hospital, Newcastle, New South Wales

Purpose: Cervicofacial lymphoedema is a recognised side effect that may result following treatment for head and neck cancer. Little is known about the effect that this condition has on patients, or the beliefs that treating health professionals hold about head and neck lymphoedema. This study aimed to investigate such perspectives of patients and health professionals.

Methodology: Six patients with head and neck lymphoedema and six health professionals experienced in the treatment of head and neck cancer patients agreed to participate in semi-structured face to face interviews. Interviews were recorded, audio files were transcribed and coded, and then analysed for themes.

Results: Themes of experiences of patients with head and neck lymphoedema and the beliefs of health professionals largely overlapped. Given its visible deformity, the main effect of lymphoedema in head and neck cancer patients is on appearance. This may or may not lead to negative psycho-social sequelae such as reduced self esteem, and poor socialisation. Although lymphoedema may improve over time, it rarely fully resolves. Multiplicity of treatments (radiation therapy, chemotherapy and neck dissection), and higher dosages of these treatments, are believed by treating health professionals to increase the risk of lymphoedema.

Conclusions: Clinicians need to be aware of those patients more likely to experience lymphoedema following treatment for head and neck cancer, and how they are affected. Understanding how patients with facial lymphoedema are affected psychologically and physically, and the importance of prompt referral for lymphoedema treatment, might ultimately improve outcomes and ensure optimal management

Declaration: Aoife McGarvey is supported by the James Lawrie Research Grant awarded in 2009 by the Calvary Mater Newcastle Hospital, and by the Hunter Medical Research Institute Barker Scholarship awarded in 2011. This contribution is free from any conflict of interest.



ADENOSQUAMOUS CELL CARCINOMA OF THE TONGUE; A CASE REPORT AND DISCUSSION.

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Department of Pathology, The Canberra Hospital, Australian Capital Territory

A 33 year old male with a strong smoking history presented to Ear Nose Throat (ENT) clinic for follow up of a right sided tongue lesion causing him discomfort.

A previous biopsy three years ago elsewhere showed hyperkeratosis with no dysplastic changes. Regular surveillance of the lesion continued with the patient continuing to smoke. Repeat punch biopsies were taken after examination showed expanding leukoplakia with a small ulcer on the right lateral tongue. Microscopy of the leukoplakic area showed moderate squamous dysplasia while the ulcer showed an adenosquamous carcinoma infiltrating the full thickness of the biopsy associated with overlying squamous dysplasia. Imaging investigations did not show evidence of regional lymph node involvement or other primary tumour.

Adenosquamous carcinoma is rare in the oromaxillofacial region. The carcinoma shows both squamous and glandular differentiation. It is usually found in the elderly and is known as an aggressive tumour with a high recurrence rate. Our patient is the second youngest reported case. This case highlights the risk of developing a carcinoma within leukoplakia of long duration and the value of surveillance with periodic biopsy.

AN UNUSUAL CASE OF SQUAMOUS CELL CARCINOMA OF THE LARYNX: A DIAGNOSTIC DILEMMA

T. B. V. Nguyen and R. Y. Chin

Nepean Hospital, New South Wales

Introduction: We present a case of a glottic SCC which was difficult to diagnose due to no ulceration and pure submucosal spread.

Case Description: A 69-year-old woman was referred for airway obstruction and stridor, persistent cough, dysphonia, dysphagia, globus, poor appetite and weight loss. She smoked 50 cigarettes for 50 years. A CT neck showed a soft tissue mass around the right vocal cord with airway narrowing. The concern was a SCC of the larynx and she had an examination under anaesthetic, laryngoscopy and biopsy on 2 occasions which were non-diagnostic. Our technique is to incise the superficial mucosa and take deep biopsies. Aggressive re-biopsy was undertaken with much disruption of the relatively normal superficial mucosa. These showed a squamous cancer of the larynx.

Discussion: This case illustrates an example where a laryngeal carcinoma was strongly suggested but difficult to diagnose. This is the only case in the literature of a cancer with pure submucosal spread and no superficial ulceration.

Conflict of Interest Declaration: I, Thomas Boi Vu Nguyen and all authors of this presentation, declare that our contribution is free of any conflict of interest.



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Poster Abstracts (cont'd)

PHARYNGEAL GASTRIC HETEROTOPIA – AN UNUSUAL CASE PRESENTATION & REVIEW OF LITERATURE

S. Ghaffar, A. R. I. AlFayez , A. H. Alassiri and S. I. Basha

Introduction: Gastric heterotopia was first reported in early 19th century. Most commonly reported site is upper oesophagus and other less commonly involved sites is oral tongue, duodenum, jejunum and rectum. Pharynx is a rare site for gastric heterotopia and till now only 11 cases are reported in English medical literature 1.

Case: This patient is a 6 year old young boy recently diagnosed as Kawasaki's disease which was managed conservatively without any squeal. Boy was noticed as having hoarse voice for last 1 year. On stroboscopic examination, vocal cord nodule was noted. He was advised conservative treatment for 3 months but without any benefit. Lately, on repeat endoscopy, a mass was noted on the posterior pharyngeal wall. He underwent pan endoscopy and excision of the mass from the posterior pharyngeal wall and vocal nodule from the left cord. Histopathology of the pharyngeal specimen was reported as Heterotopic Gastric Mucosa with chronic inflammation and benign vocal cord nodule from the vocal cord. Case was discussed in MDT and no further treatment was suggested.

Patient was followed up 11½ months postoperatively, his voice has improved and endoscopy revealed complete healing of pharyngeal wound. He is advised regular follow up.

Conclusion: Gastric Heterotopia is a rare condition but still should be considered in the differentials for pediatric upper aero-digestive lesions. We contemplated its relation with Kawasaki's disease but could not find any relation. So far, no co-relation has been reported in the literature. Treatment is symptomatic and excision is for diagnosis and curative intent.

AMELOBLASTOMA – A CASE SERIES OF 10 PATIENTS OVER 10 YEAR AT ST VINCENT'S HOSPITAL: MANAGEMENT AND LESSONS LEARNT

S. J. Turner, E. Moisidis and R. Gallagher

Ameloblastoma is a relatively uncommon odontogenic tumor that arises in the mandible or maxilla or, rarely in the adjacent soft tissues, representing 1% of all tumors and cysts of the jaws. With the mandible five times more likely to be involved than the maxilla. While ameloblastoma is considered to be a benign odontogenic tumor, they are locally invasive with a high rate of recurrence if not adequately excised. There are six histopathologic subtypes described for ameloblastoma with the aggressiveness of the surgical resection for these variants still remaining controversial within the literature, from simple enucleation to segmental mandibulectomy.

While ameloblastoma occurs relatively frequently among African and Asian populations, they represent a relatively small component of the patients treated within a head and neck cancer service in Australia; predominated by intra oral squamous cell carcinoma. We present a retrospect review of 10 patients with mixed Polynesian and Caucasian backgrounds who underwent radical surgical resection of ameloblastoma and immediate reconstruction between 2003 and 2012 at St Vincent's hospital, Sydney, Australia. We aim to highlight the issues encountered during this 10 year period in the management of these patients with ameloblastoma.

Disclosures: No conflicts of interest.



METASTATIC NECK LYMPHADENOPATHY IN HPV POSITIVE OROPHARYNGEAL CANCERS: MULTIMODALITY IMAGING FINDINGS

L. M. Van Camp and S. Bhuta

Department of Medical Imaging, Gold Coast Hospital, Gold Coast, Queensland

Purpose: To describe imaging characteristics of metastatic neck lymphadenopathy in HPV positive oropharyngeal cancers (OPC) and its utility in predicting patient's HPV status.

Material and Methods: Retrospective review of patients (February 2011 to 2012) diagnosed with OPC referred to head and neck clinic and confirmed p16 status was performed. Pretreatment staging CT and MR Neck studies were reviewed by Neuroradiologist. Imaging protocol consisted of post contrast CT and MRI neck on 128 slice CT and 1.5/3.0 T MR Systems. Abnormal lymph nodes were assessed for size, shape, number. Nodal features like smooth or irregular enhancement, low density cystic nature, low Hounsfield Unit (HU) < 25 were documented. Correlation was made between imaging features and p16 status of the tumours.

Results: 13 patients were included of which 9 were HPV+ and 4 HPV-. The youngest patient (48Y) was HPV+ and the oldest (82Y) was HPV-. The majority of cases were males (8 HPV+ and 3 HPV-). Patients with HPV+ had smaller primary tumours and lymph nodes were large bilateral, homogenous, and cystic (< 25HU) with smooth thin well defined wall and rim enhancement. HPV- primaries were large and nodes were unilateral and smaller with necrosis and irregular enhancement.

Conclusion: Imaging features of p16 positive metastatic neck nodes (Intranodal cystic change) from oropharyngeal primaries are unique and characteristic. This finding enables to differentiate HPV + or – nodes and may predict patient's p16 status based on imaging. This radiologic signature can be used as an adjunct to existing molecular tests and needs larger studies for establishing specific imaging criteria.

Conflict of Interest Declaration: No conflict of interest declared.

ANALYSIS OF SDHB,SDHC,SDHD GENE MUTATIONS IN PATIENTS WITH HEAD & NECK PARAGANGLIOMAS IN CHINA

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Objective: To study the mutations situs and prequency of SDHB, SDHC and SDHD in patients with paraganglioma in China.

Methods: Twenty four sporadic PGLs with complete clinical and pathological data were investigated. All of them were preliminarily diagnosed at Tianjin Medical University cancer hospital from 2006 April to 2011 January. Organization genomic DNA was extracted by Blood/cell/organization genomic DNA extracted kit. Each amplification fragment of SDHB, SDHC and SDHD exons gained through PCR are sequenced directly after purification. Finaly the results of sequencing are compaired with standard sequence published in the NCBI net using the software of BLAST.

Results: In this study, 4/21(19.1%)benign patients have SDH mutation. One is SDHB gene mutation, three is SDHD gene mutation. One missense germline mutation in SDHB-exon 6, S198R. Two same-sense germline mutation in SDHD-exon 2, R38X; a missense germline mutation in SDHD-exon 3, H104P. In this study, 2/3(66.7%)mlignant patients have SDH gene mutation. Both carried samesense mutation in SDHB-exon 1 A6A.

Conclusions: Sporadic paraganglioma patients carried a mutation in SDHB and SDHD. In this study SDHC mutations were not found in sporadic patients with single paraganglioma from china. It is consistent with the view that SDHD gene mutations mainly related with the benign paragangliomas. and SDHB gene mutations mainly related with the malignant paragangliomas.

Keywords: paraganglioma; succinate dehydrogenase; SDH; gene mutation; carotid body tumor

Conflict of Interest Declaration: The authors declared that no conflict of interest exist.





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