Australasian Society for Breast Disease
in association with the
Auck[illegible] Breast Cancer
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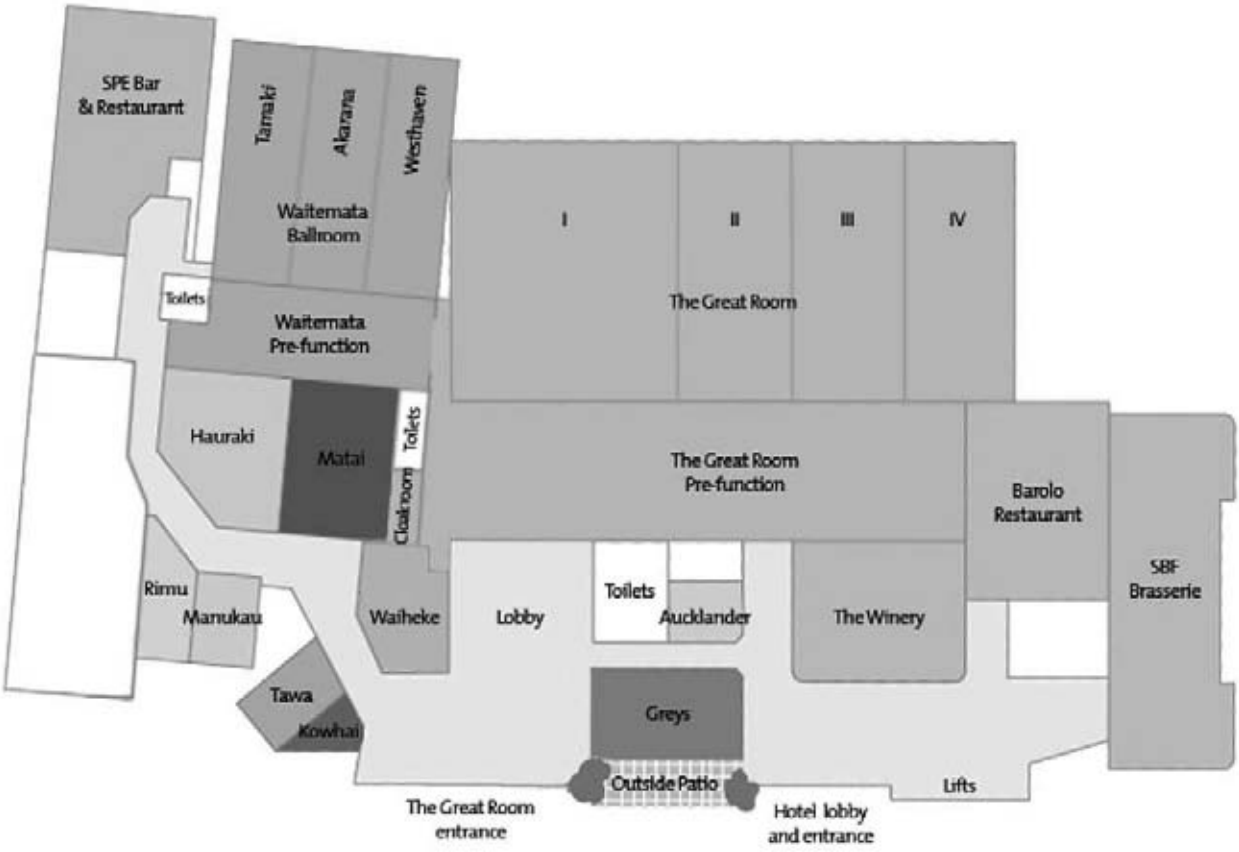
LOOKING TO THE FUTURE – A PRACTICAL MEETING ON THE BREAST

HANDBOOK AND AB[illegible]RAC[illegible]

8-10 JULY 2010

THE LANGHAM AUCKLAND,
NEW ZEALAND

THE LANGHAM, AUCKLAND



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Section I

Handbook

Welcome

On behalf of the Australasian Society for Breast Disease and Auckland Breast Cancer Study Group, we warmly welcome you to this Meeting.

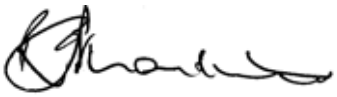
We wish to thank our sponsors New Zealand Breast Cancer Foundation, Novartis Oncology, Roche Products, AstraZeneca Oncology, Sanofi-Aventis, Siemens, Imaxeon, Hologic, SonoSite and GE Healthcare as well as all the exhibitors for their support. It would not be possible to hold this Meeting without their support. Please take the time to meet with the representatives of the participating companies.

Our sincere thanks to our international faculty and local speakers and chairs. Thank you also to the convenors and others who have contributed their time and effort to bring this program together, in particular Barbara Hochstein, Susan Fraser, Marli Gregory and Daniel de Viana.

If you are not a member of ASBD, we would like you to consider joining. Membership application forms are available from the Meeting Office.

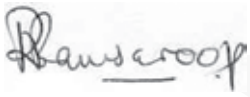
To help us in our future planning, we would greatly appreciate it if you took the time to complete the brief questionnaire provided in your satchel. Please drop the completed questionnaire into the box placed in the Meeting Office.

We trust that this will be a great Meeting and that you will enjoy all aspects of it.



Robin Stuart-Harris

President
Australasian Society for Breast Disease



Reena Ramsaroop

Chair
Auckland Breast Cancer Study Group

About the Australasian Society for Breast Disease

The Australasian Society for Breast Disease (ASBD) was constituted in 1997. Its primary goal is to promote multidisciplinary understanding and practice in the prevention, detection, diagnosis and management of breast disease and research into this area of medicine.

The Society has a nine-member Executive plus several co-opted members, providing for broad multidisciplinary representation.

The Society thanks current members for their support and involvement and welcomes new members from all disciplines involved in the area of breast disease. You can download a membership application form from our website: www.asbd.org.au or contact the Secretariat.

ASBD Executive Committee

Prof Robin Stuart-Harris	Medical Oncologist, President
Dr Kerry McMahon	Radiologist, Secretary/Treasurer
A/Prof Wendy Raymond	Pathologist, President-Elect
Dr Natacha Borecky	Radiologist
Dr Marie-Frances Burke	Radiation Oncologist
Dr Jacqueline Chirgwin	Medical Oncologist (co-opted)
Dr Roslyn Drummond	Radiation Oncologist
Dr Susan Fraser	Breast Physician
A/Prof Bruno Giuffre	Radiologist (co-opted)
A/Prof Nehmat Houssami	Breast Physician / Clinical Epidemiologist (co-opted)
Mr James Kollias	Surgeon (co-opted)
Prof Sunil Lakhani	Pathologist (co-opted)
A/Prof Warwick Lee	Radiologist (co-opted)
Dr Julia Leeds	BCNA Representative (co-opted)
Dr Lynne Mann	Surgeon
Dr Belinda Scott	Surgeon (co-opted)
Dr Daniel de Viana	Surgeon
Ms Solei Gibbs	Executive Officer

Previous Executive Committee Members

Dr Geoffrey Beadle	Medical Oncologist
A/Prof Michael Bilous	Pathologist
A/Prof John Boyages	Radiation Oncologist
Prof Michael Friedlander	Medical Oncologist
Dr Colin Furnival	Surgeon
Prof Michael Green	Medical Oncologist
Prof Jennet Harvey	Pathologist
Dr Cherrell Hirst	Breast Physician
Ms Elspeth Humphries	BCNA Representative (co-opted)
Dr Michael Izard	Radiation Oncologist
Dr Jack Jellins	Scientist
Ms Veronica Macaulay-Cross	BCNA Representative (co-opted)
Mr William McLeay	Surgeon
Ms Lyn Moore	BCNA Representative (co-opted)
Dr Margaret Pooley	Surgeon
Prof Mary Rickard	Radiologist

Contact Details

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Fax: (07) 3847 7563 (from overseas: +61 7 3847 7563)
Email: info@asbd.org.au
Website: www.asbd.org.au

About the Auckland Breast Cancer Study Group

Established in 1976, the Auckland Breast Cancer Study Group (ABCSG) consists of a multidisciplinary team with special interest in breast cancer, including diagnosis, treatment and progression of the disease. The membership includes representatives from the disciplines of Radiology, Surgery, Pathology, Oncology, and Consumers, Breast Physicians and breast care nurses. The group is managed by a five member executive committee.

For over 20 years the ABCSG has worked with local and international organisations on a number of clinical trials spanning both early and advanced breast cancer. The special projects undertaken by the ABCSG include the establishment of the Auckland Breast Cancer registry and the organisation of the breast diseases conference.

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Trade Exhibition

Booth no.	Company
1.	Genetic Technologies Limited
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3. & 4.	NZ Breast Cancer Foundation
5. & 6.	InVivo
7.	GE Healthcare
8.	Healthscope
9.	Gate Healthcare
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12.	Siemens
13.	Sanofi-Aventis
14.	Imaxeon
15. & 16.	Bard
17. & 18.	AstraZeneca Oncology
19. & 20.	Hologic
21.	SonoSite
22.	Sectra
23. & 24.	Roche Products

Venue

The Langham Auckland
83 Symonds Street
Auckland
T: +64 9 379 5132
F: +64 9 377 9367

Meeting Office

The Meeting Office is located in Greys Room and it will be open during the following times:

Thursday 8 July 2010	1100-1900 hours
Friday 9 July 2010	0730-1730 hours
Saturday 10 July 2010	0730-1500 hours

Speakers' Audiovisual Testing Room

Speakers' Audiovisual Testing will be available in the Aucklander Room during the following times:

Thursday 8 July 2010	1500-1800 hours
Friday 9 July 2010	0730-1600 hours
Saturday 10 July 2010	0730-1300 hours

Namebadges

Please wear your namebadge at all times. It is your admission pass to sessions and morning and afternoon teas. If you misplace your namebadge, please contact the Meeting Office.

Tickets

Attendance at workshops and social functions is by ticket only. Tickets are enclosed in your registration envelope with your namebadge, according to your attendance indication on the registration form. If you misplace any tickets or do not have tickets to the activities you wish to attend, please contact the Meeting Office.

Special Diets

If you have made a special dietary request, please identify yourself to serving staff at functions.

Messages

A message board is located in the Meeting Office. Please advise potential callers to contact The Langham (see details above) and ask for the Meeting Office. Please check the board for messages as personal delivery of messages cannot be guaranteed.

Dress

Smart casual attire is appropriate for Meeting sessions.
Dress for Meeting dinner is Bollywood or cocktail wear.

Lunches

Lunches will be served in the Trade Exhibition area. Lunch service is by ticket only. Please ensure you have the correct tickets. Additional tickets are available at $40 per person.

Welcome Drinks

Thursday 8 July 2010, 1830-2000 hours

The welcome reception provides you the opportunity to mingle with your colleagues in the ambience of the Auckland Museum Foyer. Included for fulltime delegates and registered partners. Additional tickets cost $50 per person. Buses will leave from the front of The Langham at 1830 hours sharp.

Networking Drinks

Friday 9 July 2010, 1700-1800 hours

Following the last session for the day, catch up with your colleagues at drinks in the Trade Exhibition area. Included for fulltime and Friday delegates and registered partners only. No additional tickets.

Meeting Dinner

Sponsored by Novartis Oncology

Saturday 10 July 2010, 1930-2300 hours

Join your fellow delegates in the colour and vibrancy of a Bollywood night in The Langham Ballroom. Includes pre-dinner refreshments in the Ballroom foyer, entertainment, dinner and drinks. Included for full time delegates and registered partners. Additional tickets: $120 per person. Cocktail wear / Bollywood theme.

Annual General Meeting

The Annual General Meeting of the Australasian Society for Breast Disease will be held in the Hauraki Room at 0730 hours on Saturday 10 July 2010. Breakfast will be served during the Meeting. Please reconfirm you attendance / nonattendance upon registration. Admission is free to members only.

Consumer Forum

New Zealand Breast Cancer Foundation, Australasian Society for Breast Disease and the Auckland Breast Cancer Study Group will present a joint consumer forum as part of the Meeting. Speakers and chairs will include: Heather Shotter, NZBCF; Dr Jackie Blue, MP; Libby Burgess, breast cancer advocate; Dr Marli Gregory, Breast Physician; Dr Barbara Hochstein, Radiologist; Prof Shaun Holt, Medical Researcher, University Lecturer; Dr David Hyams, Breast Surgeon; Dr Geraldine Meechan, Psychologist; Dr Claire Ryan, Lawyer and breast cancer advocate; and Dr Belinda Scott, Breast Surgeon.

CPD

RACS

This educational activity has been approved in the Royal Australasian College of Surgeons' Continuing Professional Development (CPD) Program. Fellows who participate can claim one point per hour (maximum 12 points) in Category 4: Maintenance of Clinical Knowledge and Skills towards 2010 CPD totals.

RANZCR

The Royal Australian and New Zealand College of Radiologists will award points for attendance at the 'Looking to the Future – A Practical Meeting on the Breast' as follows:

- 14.25 points may be claimed for attendance at ultrasound workshop and the symposium on Thursday 8 July 2010.
- 12 points may be claimed for attendance at the Meeting on Friday 9 July 2010.
- 9 points may be claimed for attendance at the Meeting on Saturday 10 July 2010.
- A total of 35.75 points can be claimed for attendance on all three days of this Meeting.
- For anyone attending only part of this Meeting, points may be claimed pro rata at 3 points per learning hour for workshops and 1 point per hour for lectures.

RACGP

Breast Physicians and General Practitioners can access the RACGP website www.racgp.org.au to determine the QA points on an individual basis (Category 2) for Meeting attendance.

Keynote speakers

David M Hyams MD, FACS

David Hyams is Director of Surgical Oncology at the Desert Regional Medical Center in Southern California. During much of the past 10 years he served as National Director of Clinical Research for the Aptium Oncology Research Network, a national consortium of academic and community cancer centers in the United States. He previously served as the Executive Medical Officer of the National Surgical Adjuvant Breast and Bowel Project (NSABP) at its headquarters in Pittsburgh, Pennsylvania, where he also held an academic appointment at Allegheny University of the Health Sciences. Dr Hyams is a founder of Premier BioLogix, a US-based biotechnology company developing new molecular diagnostic tools.

Dr Hyams will cover topics on molecular diagnostic tools in DCIS / LCIS and the latest trends in surgery and conduct workshops on reconstructive surgery.

Sunil Lakhani MD, FRCPath (UK), FRCPA

Sunil Lakhani is Professor and Head of Molecular & Cellular Pathology in The School of Medicine, University of Queensland. He is Head of the Breast Group at the University of Queensland Centre for Clinical Research (UQCCR) and Visiting Breast Pathologist at The Royal Brisbane and Women's Hospital. He is lead pathologist for North Brisbane Breast Screening Service. Prior to his move to Australia in 2004, he was Professor of Pathology at The Institute of Cancer Research and The Royal Marsden Hospital, London, UK. He has authored/edited a number of undergraduate and postgraduate textbooks and book chapters and published more than 150 scientific papers. He is a series editor for the WHO Tumour Classification Books and on the panel for the WHO Classification of Tumours of the Breast.

Professor Lakhani is deputy editor of *Breast Cancer Research* and on the board of *Journal of Pathology, Virchow's Archives and International Journal of Experimental Pathology*. He sits on a number of national and international advisory panels.

Professor Lakhani will talk to us on molecular pathology in relation to breast cancers. He will conduct two workshops, one covering a practical multiheader slide session of interesting and problem breast cases. The second workshop will be on molecular pathology and will be conducted as a short lecture and question format.

Bruce Porter MD, FACR

Another special feature of this meeting will be the presence of Dr Bruce Porter. He is the cofounder and medical director of First Hill Diagnostics Imaging in Seattle, Washington. Dr Porter has been in the forefront of the development of MR in the investigation of breast cancer in USA and has an enviable reputation as a thoughtful innovator and busy hands-on radiologist involved in the day-to-day issues of incorporating MR into the diagnostic algorithm of breast problems. In this meeting he will primarily be providing a practical perspective gained by his extensive and productive involvement in the oncological aspects of breast imaging. In addition to involvement in the main sessions, Dr Porter will hold a number of smaller group workshops to discuss the issues of the techniques of MR breast acquisition as well as MR guided biopsy with a separate session to discuss the process of reporting these complex studies.

Faculty Members

Dr Stephen Allpress MBChB, FRCPA

Stephen Allpress trained in Pathology both in Melbourne and Auckland before gaining two years post fellowship experience in cytology in North America. After eight years in Perth, where he developed his interest in breast pathology, he returned to Auckland. Dr Allpress is now Clinical Director of Surgical Pathology at North Shore Hospital and Lead Pathologist at Breast Screen Waitemata Northland.

Prof Chellaraj Benjamin ONZM, MBBS, DMRT, MD, FRANZCR

Chellaraj Benjamin is the present Clinical Director at Auckland Radiation Oncology Centre. He is also Consultant Oncologist at Oncology Department at Auckland Hospital. He was the past president of Auckland Breast Cancer Study Group. Professor Benjamin was bestowed with 'Papalii the highest title for his service to the people of Samoa in 2005. He was given the 'Certificate of Honour' for Distinguished Service to the Community by the RT Hon Prime Minister of New Zealand in 2006. He received Queen's Medal (Officer of New Zealand Order of Merit) for his service to medicine and community in 2008. Professor Benjamin is the present Deputy Dean at the Oceanic University of Medicine.

Dr Natacha Borecky MBBS, Dip Rad (Belgium)

Natacha Borecky received her medical and radiological degrees from the University of Brussels, Belgium in 1995. After two years of training in Paediatric Radiology, Breast Imaging and MRI at the University Hospital in Lausanne, Switzerland, she passed her thesis on MRI of thoracic lymphangioma in children. During her radiological training, Dr Borecky developed a special interest in Breast Disease and became specialist in Breast Imaging. She is currently working as VMO Radiologist for NSW BreastScreen at the Westmead Breast Cancer Institute in Sydney and in rural areas. Dr Borecky is an educational affiliate of the RANZCR since 2008 and an Executive member of the ASBD since 2006.

Dr Reuben Broom BHB, MBChB, FRACP

Reuben Broom graduated in medicine from the University of Auckland and trained locally before completing his clinical fellowship in Medical Oncology at the Princess Margaret Hospital, Toronto, Canada in 2008. He then worked as Locum Staff/Consultant in Medical Oncology at the Princess Margaret. Since 2006, Dr Broom has been a Consultant in Medical Oncology at the Auckland City Hospital. His clinical practice and research interests are focused on both breast and renal cancer. He is particularly interested in translational and clinical research focusing on bone metastases from both these malignancies, and receptor discordance over time and phase II/III clinical trials. He continues to play an active role as a co-investigator in multicentre trials and has published and presented numerous papers.

A/Prof Ian Campbell MBChB, FRACS

Ian Campbell is Associate Professor at Waikato Clinical School, University of Auckland School of Medicine, Honorary Lecturer at the University of Sydney, Consultant General Surgeon and Clinical Director of Breast Care Centre at the Waikato Hospital, Hamilton. He is currently on the Board of ANZBCTG, member of Scientific Advisory Committee of ANZBCTG, Chair of Midland Cancer Network Breast Cancer Working Group, Chair of NZ Guidelines for Management of Breast Cancer, member of SNAC Trial Management Committee, Chair of Waikato Breast Cancer Trust, amongst many other positions.

Dr Jacquie Chirgwin MBBS, MA (Oxon), FRCP (UK), FRACP, GAICD

Jacquie Chirgwin initially trained in the UK. Since 1990 she has been a Medical Oncologist at Box Hill and Maroondah Hospitals in Melbourne, for nearly ten years specialising in Breast Cancer only. She has a strong commitment to clinical trials and is currently the Chair of the Board of Directors of the ANZ BCTG. She is currently the leader of the Breast Tumour Group at North East Melbourne Integrated Cancer Service (NEMICS), and has a particular interest in Multidisciplinary Team care of Advanced Breast Cancer.

A/Prof Anthony Doyle BSc, MBChB, FRANZCR, ABR

Anthony Doyle is Associate Professor of Radiology at the University of Auckland, New Zealand. He became involved in breast imaging while on staff at the University of Utah in the USA in 1990, being one of the first radiologists to investigate and promote image guided core biopsy of the breast and breast MRI. He remains active in breast imaging research.

Prof Dallas English BSc, MS, PhD

Dallas English is the Director of the Centre for Molecular, Environmental, Genetic and Analytic Epidemiology at Melbourne School of Population Health, The University of Melbourne. He teaches epidemiology to graduate students and has a research program in cancer epidemiology. He is a co-investigator on the Melbourne Collaborative Cohort Study (MCCS), which is based at the Cancer Council Victoria, and has an appointment at the Cancer Council. He worked for many years on the epidemiology and prevention of skin cancer, but most recently has been focussing on breast, colorectal and prostate cancer within the MCCS. The MCCS program includes studies of lifestyle factors such as diet, obesity, hormones and genetic variants. His other main research interest is in evaluating cancer screening programs. He is a member of the BreastScreen Australia Evaluation Advisory Committee and is a member of the Boards of BreastScreen Victoria and the Victorian Cytology Service.

Dr Susan Fraser MBBS, FASBP

Dr Sue Fraser has practised full time as a breast physician for the past 20 years. She currently works in both Sydney where she is Senior Breast Physician at Sydney Breast Clinic and in Cairns where she works as a VMO in the Cairns Breast Clinic. She reads Mammograms for the Queensland and NSW BreastScreen program. She is the current President of the Australasian Society of Breast Physicians.

Dr Sonja Freese MBChB, FASBP

Sonja Freese is a Breast Physician at Breast Associates Ltd in Auckland and at BreastScreen Waitemata Northland in Takapuna. She is also the Clinical Director of the Pink Pilates Programme.

A/Prof Bruno Giuffrè MBBS, FRANZCR

Bruno Giuffrè is Senior Staff Specialist Radiologist in Radiology Department at Royal North Shore Hospital and North Shore Private Hospital. His areas of clinical and research interest are Breast and Musculoskeletal Imaging and he has been instrumental in developing and supervising techniques and protocols for these disciplines at RNSH. He is also involved in many aspects of medical Informatics. His current research projects include correlation of histopathology with MRI abnormalities of breast lesions and the correlation between MRI and Ultrasound abnormalities of joints with operative findings. He has extensive teaching experience with a wide variety of audiences from medical students to clinical colleagues.

Mr Stan Govender MBChB, FRACS

Stan Govender is an Oncoplastic Breast Surgeon. He was born in Durban, South Africa and graduated from the University of Natal in 1988 with a distinction and the prize in General Surgery. He moved to New Zealand in 1992 and completed postgraduate training obtaining FRACS in 1999. He is a trained breast and general surgeon and practises all aspects of breast surgery including oncologic surgery, sentinel lymph node biopsy, breast reconstruction, breast augmentation and breast reduction. Mr Govender has been part of the St Marks team in Auckland since 1999.

Dr Marli Gregory MBChB, FASBP

Marli Gregory is a graduate of the Auckland School of Medicine who has worked as a Breast Physician in New Zealand and Australia. She is the current Chair of the Medical Advisory Committee of the New Zealand Breast Cancer Foundation, and a member of the Auckland Breast Cancer Study Group. She has a particular interest in the management of women at increased risk of breast cancer.

Dr John Harman MBChB, FRACS

John Harman set up New Zealand's first breast centre in Auckland in 1993. To date, the centre has seen 45,000 women and treated over 2,500 breast cancers. In 1999, John Harman was part of successful lobbying for Government to set up a nationwide screening program. He is a Trustee of the New Zealand Breast Cancer Research Trust and a member of a number of professional societies. Dr Harman's research interests include screening ultrasound of the breast, psychosocial support for breast cancer patients and breast reconstruction. He has given numerous papers on breast cancer, breast reconstruction and the multidisciplinary team in breast centres.

Dr Gavin Harris BMed Sci, BMBS, MRCPath

Gavin Harris trained in Nottingham Breast Pathology Unit, UK with Professors Ian Ellis, Chris Elston and Sarah Pinder. He relocated to Canterbury Health Laboratories, Christchurch in 2003 maintaining interest in breast pathology, and helping to establish the Christchurch Breast Cancer Register, funded by the New Zealand Breast Cancer Foundation in 2009. Dr Harris was involved in the development of the New Zealand Management of Early Breast Cancer Guidelines launched in 2009.

Dr Barbara Hochstein BSc, MBChB, FRACR

Barbara Hochstein is a consultant radiologist at Rotorua Public Hospital and Clinical Director of the Bay of Plenty sub-contract for Breastscreen Aotearoa. She is a visiting clinical Lecturer at the Auckland Medical School. She has been involved in breast imaging since 1988 and was an original medical advisor to the NZ Breast Cancer Foundation from 1996 until she left Auckland in 1999. She organised the first NZ multi-disciplinary breast conference at the Auckland Medical School in 1996.

Prof Shaun Holt BPharm (hons), MBChB (hons)

Shaun Holt is the founder of Clinicanz, New Zealand's only clinical trials Site Management Organisation. Previously, he was the founder of P3 Research, an independent clinical trials unit based in Wellington and Tauranga, and Research Review, a company that produce regular reviews of the medical literature for health professionals. He is Ex-Medical Director of Clinical Trials in the Wellington Asthma Research Group. Professor Holt holds Pharmacy and Medicine degrees, has been the Principal Investigator in over 50 clinical trials and has over 80 publications in the medical literature. He is an Honorary Research Fellow at the Medical Research Institute of New Zealand, an Advisor to the Asthma and Respiratory Foundation, a regular contributor on TVOne's Breakfast programme and national radio shows and lectures at Victoria University of Wellington.

Ms Lou James BHSc (phty), MNZSP

Lou James is a Physiotherapist, and Founder and Programme Director of Pink Pilates, New Zealand. She has postgraduate training in clinical pilates completed in Adelaide and Miami, and is a Certified Breast Cancer Exercise Specialist. Ms James specialises in the design of individualised exercise rehabilitation programs for clients with specific medical limitations.

Adjunct A/Prof Warwick Lee MBBS, BSc(Med), RANZCR, DDU

Warwick Lee is the State Radiologist for BreastScreen NSW and Adjunct Associate Professor, Discipline of Medical Radiation Sciences, University of Sydney. He has been involved with BreastScreen for over 20 years in a clinical and training capacity and is a member of the Breast Imaging Reference Group of the RANZCR and the National Quality Management Committee of BreastScreen Australia. Professor Lee is a Past President of ASBD.

Mr Julian Lofts MBChB, FRACS

Julian Lofts is a plastic and reconstructive surgeon in private practice in Auckland. He specialises in aesthetic and reconstructive breast surgery and body contouring. Between 1991 and 1993 he worked fulltime at the University of Auckland Medical School researching the application of cultured keratinocytes in the treatment of burns and wound healing disorders and set up a national cryopreserved skin bank. He was awarded the Louis Barnett Prize for best registrar paper and the RACS Travelling Fellowship in 1993.

Dr Geraldine Meechan

Psychologist, Auckland

Dr David Moss MBChB, FRACS

David Moss is a Breast and General Surgeon from Auckland. He is a Consultant Surgeon at Middlemore Hospital, Manukau Surgical Centre and the Auckland Breast Centre. He is the Lead surgeon for Breast Screen Counties Manukau, and Chairman of the Surgeons UDG of Breast Screen Aotearoa. He is also the surgical representative of the Breast Screen Advisory group of Breast Screen Aotearoa. Dr Moss is the supervisor of training at Middlemore Hospital and a member of the New Zealand Board in General Surgery. He is involved in clinical research with interests in Ethnicity and Breast cancer as well as minimising the morbidity of screening.

Dr Alex Ng BHB, MBChB, FRACS

Alex Ng is consultant Breast and General Surgeon at the Auckland City Hospital, and in private practice at Breast Associates. He is an Executive member of the Auckland Breast Cancer Study Group, and medical board member of the Cancer Society of New Zealand, Auckland Division.

Dr David Porter MBChB, Dip Obst, FRACP, MD

David Porter has been a consultant medical oncologist at Auckland Hospital since 1995. His main areas of interest are the management of bone and soft tissue tumours and breast cancer, the supportive care of patients receiving chemotherapy and survivorship issues, as well as the pharmacology of cancer therapeutics. Dr Porter has been a member of the ANZBCTG

since 1995, and was a member of the group that developed the NZ Guidelines for the treatment of early breast cancer and the subsequent implementation advisory group.

Dr Reena Ramsaroop MCChB, FFPath (SA), PhD, MIAC

Specialist Pathologist, Diagnostic Medical Laboratory, Auckland
Reena Ramsaroop's subspecialty interests are in breast pathology and gynaecologic oncology. With her particular interests in women's health, she is the lead Pathologist for Breast Screen Aotearoa (Auckland-North regions). She is the Chair of the Auckland Breast Cancer Study Group and a member of the Breast Screen Advisory Group. Dr Ramsaroop works in a busy pathology practice in Auckland servicing specialist clinicians.

A/Prof Wendy Raymond MBBS, MD, FRCPA

Wendy Raymond holds appointments as a pathologist at Flinders Medical Centre / Flinders University, Breast Screen SA and in private practice at Healthscope Pathology in Adelaide. She has a longstanding interest in breast disease, having completed an MD on "Immunohistochemical markers in breast carcinoma" in 1991. She has co-authored several Australian guidelines in breast cancer management and has served on breast pathology/ cytopathology quality assurance committees of the RCPA.

Dr Belinda Scott MBChB, FRACS

Belinda Scott is Chair of Medical Committee of the New Zealand Breast Cancer Foundation, a member of ANZ Breast Cancer Trials Group, member of Auckland Breast Cancer Study Group, Executive Committee member of Australasian Society of Breast Disease and member of the New Zealand Special Interest Group for Breast Cancer. Dr Scott is Director of the Breast Associates Clinic in Auckland. She has a keen interest in women's health and specialises in breast cancer diagnosis and treatment, does implant reconstruction and other reconstruction of the breast with plastic surgical backing, breast reduction and augmentation surgery.

Prof Robin Stuart-Harris MD, FRCP, FRACP

Robin Stuart-Harris trained in medical oncology and palliative care at the Royal Marsden Hospital, London, United Kingdom, but migrated to Australia in 1987. In February 1998, he took up the appointment of Senior Staff Specialist in Medical Oncology at the Canberra Hospital. He remains a Senior Staff Specialist in Medical Oncology, but is also Clinical Director of the Capital Region Cancer Service. He has particular interests in the management of both early and advanced breast cancer and the psychosocial aspects of cancer. Professor Stuart-Harris is the current President of the Australasian Society for Breast Disease.

Dr Paul Thompson BHB, MBChB, MD, FRACP

Paul Thompson is a consultant medical oncologist at Auckland City Hospital. He has a particular interest in the research and treatment of gastrointestinal cancers and currently chairs the national Gastrointestinal Cancer Interest Group and the Specialist Advisory Committee in Medical Oncology of the College of Physicians.

Dr Daniel de Viana MBBS, FRACS

Daniel de Viana is a medical graduate from the Queensland University, who completed his general surgery training through Princess Alexandra Hospital, Brisbane. He undertook postgraduate training in breast surgery and cancer management in the United Kingdom. He settled on the Gold Coast in 1999, initially working as Staff Breast Surgeon at the Gold Coast Hospital, and commenced private practice in 2000. Dr de Viana is a consultant at BreastScreen Southport, member of surgical review panel of BreastScreen Queensland, member of Executive Committee of the Australasian Society for Breast Disease, member of Royal Australasian College of Surgeons Breast Section, and member of the International Society of Breast Disease.

Presenters - Posters

A/Prof Ian Campbell MBChB, FRACS

Breast Surgeon, Waikato Breast Cancer Trust and Breast Care Centre, Waikato Hospital, Hamilton, New Zealand

Dr Corinne Ooi MBBS, FRACS

Surgeon, Breast Care Centre, Waikato Hospital, Hamilton, New Zealand

Dr Reena Ramsaroop MCChB, FFPath (SA), PhD, MIAC

Specialist Pathologist, Diagnostic Medical Laboratory, Auckland, New Zealand

Dr Belinda Scott MBChB, FRACS

Breast Surgeon, Breast Associates Ltd, Auckland, New Zealand

Prof Gurpreet Singh MS

Professor of Surgery, Departments of Surgery and Radiotherapy, Postgraduate Institute of Medical Education & Research (P.G.I.M.E.R.), Chandigarh, India

Venues

The venue for all plenary sessions is Great Room 4.

Thursday 8 July 2010

1130-1900 hrs	Registration Venue: Greys Room
1500-1800	Speakers' audiovisual testing Venue: Aucklander Room
0230-1645	**Workshop: Office Ultrasound in Surgical Practice** Venue: Hauraki Room (TBC)
1830-2000	Welcome drinks Venue: Auckland Museum Foyer

Friday 9 July 2010

0730-1730 hrs	Registration Venue: Greys Room
0730-1600	Speakers' audiovisual testing Venue: Aucklander Room
1330-1500	**Workshop: Breast reconstruction** Venue: Westhaven Room
1330-1500	**Workshop: Molecular pathology** Venue: Great Room 4
1330-1500	**Workshop: MR breast technique** Venue: Great Room 3
1530-1700	**Workshop: MR breast reporting** Venue: Great Room 3
1530-1700	**Workshop: Conjoined surgery and pathology – Understanding each other** Venue: Great Room 4
1530-1700	**Workshop: Is breast cancer a lifestyle disease?** Venue: Westhaven Room
1730-1900	Networking drinks Trade Exhibition area

Saturday 10 July 2010

0730-1500	Registration Venue: Greys Room
0730-0845	Australasian Society for Breast Disease Annual General Meeting Venue: Hauraki Room
0730-1300	Speakers' audiovisual testing Venue: Aucklander Room
0900-1230	Consumer forum Venue: Waitemata Ballroom
1330-1500	**Workshop: Pathology** Venue: Great Room 4
1330-1500	**Workshop: MR guided biopsy** Venue: Great Room 3
1330-1500	**Workshop: Update on guidelines and trials** Venue: Waitemata Room
1930-2300	Meeting dinner Venue: The Langham Ballroom

Please note that the program is subject to change.

Thursday 8 July 2010

1130-1900	Registration	
1230-1645	**Workshop: Office Ultrasound in Surgical Practice** *Sponsored by GE Healthcare and SonoSite*	
	Practical Breast Ultrasound Optimisation	Warwick Lee
	Breast Ultrasound – Lesion Appearance	Warwick Lee
	Integration of office ultrasound into (surgical) practice	Daniel de Viana
	Ultrasound guided biopsy	Natacha Borecky
	Perioperative ultrasound techniques	Belinda Scott
	Discussions / questions	Panel
	Practical session	Faculty and Susan Fraser and Sonja Freese
1700-1815	**Minisymposium: Is breast cancer being overdiagnosed?**	
	Co-chairs: Barbara Hochstein and Robin Stuart-Harris	
	Dallas English, Ian Campbell, David Hyams, Bruce Porter and Reena Ramsaroop	
	Discussion	Faculty
1830-2000	Welcome drinks	

Friday 9 July 2010

0900-1030	**Session 1: Benign and Indeterminate Disease**	
	Chair: Reena Ramsaroop	
	Welcome	Reena Ramsaroop and Robin Stuart-Harris
	Risk factors	Dallas English
	Indeterminate lesions – B3 - pathology	Sunil Lakhani
	Surgical management of Indeterminate lesions	David Moss
	Discussion	Faculty
1030-1100	Morning break *Sponsored by sanofi-aventis*	
1100-1230	**Session 2: In Situ Lesions**	
	Chair: Ian Campbell	
	Carcinoma in situ: A key indication for MR	Bruce Porter
	Changing face of LCIS	Sunil Lakhani
	Management of DCIS/LCIS	David Hyams
	Discussion	Faculty and Alex Ng
1230-1330	Lunch	
1330-1500	**Workshop: Breast reconstruction**	
	Chair: Belinda Scott	
	David Hyams, Julian Lofts, John Harman, Stan Govender, Daniel de Viana	
1330-1500	**Workshop: Molecular pathology**	Sunil Lakhani
	Chair: Gavin Harris	
1330-1500	**Workshop: MR breast technique**	Bruce Porter
	Chair: Bruno Giuffre	
1500-1530	Afternoon break *Sponsored by Siemens*	
1530-1700	**Workshop: MR breast reporting** *Sponsored by Imaxeon*	Bruce Porter
	Chair: Bruno Giuffre	
1530-1700	**Workshop: Conjoined surgery and pathology – Understanding each other**	
	Chair: Wendy Raymond	
	David Hyams, Sunil Lakhani, Stephen Allpress, Daniel de Viana	

1530-1700	**Workshop: Is breast cancer a lifestyle disease?**	
	Co-chairs: Sue Fraser and Marli Gregory	
	Introduction	
	Prevention	Dallas English
	The importance of psychological factors	Geraldine Meechan
	Exercise after Breast Cancer	Lou James
	Complementary therapies - the science	Sean Holt
	Discussion	Faculty
1700-1800	Networking drinks	

Saturday 10 July 2010

0730-0845	Australasian Society for Breast Disease Annual General Meeting	
0900-1230	Consumer forum *Sponsored by New Zealand Breast Cancer Foundation*	
0900-1030	**Session 3: Invasive Breast Disease I** *Sponsored by Novartis Oncology*	
	Chair: Paul Thompson	
	MR staging of breast cancer	Bruce Porter
	What's new in radiology?	Anthony Doyle
	Neoadjuvant therapy for breast cancer	Robin Stuart-Harris
	Discussion	Faculty
1030-1100	Morning break	
1100-1230	**Session 4: Invasive Breast Disease II** *Sponsored by AstraZeneca Oncology*	
	Chair: Robin Stuart-Harris	
	What's new in medical oncology?	Reuben Broom
	What's new in radiation oncology?	Chellaraj Benjamin
	Molecular biology and the surgeon: A curiosity, or the future of breast cancer care?	David Hyams
	Discussion	Faculty
1230-1330	Lunch	
1330-1500	**Workshop: Pathology**	Sunil Lakhani
	Chair: Stephen Allpress	
1330-1500	**Workshop: MR guided biopsy** *Sponsored by Hologic*	Bruce Porter
	Chair: Warwick Lee	
1330-1500	**Workshop: Update on guidelines and trials** *Supported by an educational/research sponsorship by Roche Products Pty Ltd*	
	Chair: Jacqueline Chirgwin	
	Clinical Practice Guidelines	David Porter
	Surgical guidelines and trials – Sentinel Node Biopsy	Ian Campbell
	ANZBCTG	Jacqueline Chirgwin
	TROG	Chellaraj Benjamin
1500-1530	Afternoon break	
1530-1700	**Session 5: Meet the Experts – Opinions on Case Studies** *Supported by an educational/research sponsorship by Roche Products Pty Ltd*	
	Moderators: Belinda Scott and Robin Stuart-Harris	
	David Hyams, Sunil Lakhani, Bruce Porter, Chellaraj Benjamin	
1930-	Meeting dinner *Sponsored by Novartis Oncology*	

Section II

Abstracts

Workshop: Office Ultrasound in Surgical Practice

Sponsored by GE Healthcare and SonoSite

Notes

Practical Breast Ultrasound Optimisation

Warwick Lee

Breast Ultrasound – Lesion Appearance

Warwick Lee

Notes

Integration of office ultrasound into (surgical) practice

Daniel de Viana

Ultrasound guided biopsy

Natacha Borecky

Perioperative ultrasound techniques

Belinda Scott

Minisymposium: Is breast cancer being overdiagnosed?

Dallas English, Ian Campbell, David Hyams, Bruce Porter and Reena Ramsaroop

Notes

Overdiagnosis of breast cancer

Dallas English

Overdiagnosis of disease is defined as the diagnosis of disease that would not cause symptoms or death in the patient's lifetime. It is one of the major forms of harm of screening for asymptomatic disease. It exists for breast cancer just as it does for other cancers for which there is screening. Estimates of the proportion of screen-detected breast cancers that are 'overdiagnosed' vary widely. The debate about the extent of overdiagnosis is heated and would benefit from better science and from more dispassionate analysis and presentation of the totality of harms and benefits of screening

Is breast cancer being overdiagnosed? – a surgeons perspective

Ian Campbell

Great concern is expressed about overdiagnosis of invasive and in situ cancers in breast screening programmes given our particular mandate "to do no harm", when carrying out a screening intervention of otherwise healthy individuals.

Our hope for the future is that with more sophisticated molecular typing we may be able to indentify those tumour subtypes that may run a completely indolent course with minimal or no treatment.

In the meantime it remains somewhat paradoxical that we castigate breast cancer screening programmes for detecting precancerous lesions such as DCIS, where this is the main goal in others eg cervical screening; and, we are concerned about over diagnosis of invasive breast cancers in a minority of the screen detected cancers, yet comfortable to give often toxic therapies to many women in order to benefit only a few.

Notes

Session 1: Benign and Indeterminate Disease

Risk factors

Dallas English

Indeterminate lesions: B3 – Pathology

Sunil R Lakhani
The University of Queensland Centre for Clinical Research, The Royal Brisbane & Women's Hospital, Brisbane, Australia.

The use of needle core biopsies to evaluate abnormalities identified on breast screening is now well established. The histopathological findings are categorised on a 'B-Classfication' system: B1=normal/non-diagnostic, B2=benign, B3=uncertain malignant potential, B4=suspicious for malignancy and B5=malignant.

The B3 category comprises a heterogeneous group of proliferations that include atypical ductal hyperplasia (ADH), lobular neoplasia (ALH/LCIS), columnar cell lesions (CCL) and flat epithelial atypia (FEA), radial scar (RS/CSL), phyllodes tumours, papillary lesions, mucinous lesions and spindle cell proliferations. In clinical practice, the rate of B3-biopsies ranges from 3-10%. This is problematic as there is a low but significant risk of associated malignancy following a B3 diagnosis on core biopsy. Rates of malignancy of 15-35% have been reported in the literature. Of course, this means that there are also a substantial number of women who will have surgery for further 'benign' disease only.

The rate of malignancy varies with the type of pathology encountered on the core biopsy as well as the degree of atypia. Not surprisingly, atypia in proliferative disease has a strong correlation with subsequent malignant diagnosis. However, it should not be underestimated that in some proliferations, such as CCLs, assessing atypia is anything but straightforward.

There is debate as to whether such patients should inevitably have further wide excision or whether obtaining further material either with subsequent needle core technique or mammotome biopsy is more appropriate.

A number of the common entities encountered by pathologists will be illustrated and discussed with regards to features likely to predict further significant disease in the adjacent breast.

Selected References of Interest:

1. Houssami N, Ciatto S, Bilous M, Vezzosi V, Bianchi S. Borderline breast core needle histology: predictive values for malignancy in lesions of uncertain malignant potential (B3). *Br J Cancer* 2007;**96**;1253-1257.
2. Carder PJ, Khan T, Burrows P, Sharma N. Large volume "mammotome" biopsy may reduce the need for diagnostic surgery in papillary lesions of the breast. *J Clin Pathol* 2008;**61**;928-933.
3. Hayes BD, O'Doherty A, Quinn CM. Correlation of needle core biopsy with excision histology in screen-detected B3 lesions: the Merrion Breast Screening Unit experience. *J Clin Pathol* 2009;**62**;1136-1140.
4. Provenzano E, Pinder SE. Pre-operative diagnosis of breast cancer in screening: problems and pitfalls. *Pathology* 2009;**41**;3-17.

Notes

Surgical management of indeterminate lesions

David Moss

Management of indeterminate lesions is one of the most complex areas of breast surgery. There are I believe several reasons for this.

1. the classification and understanding of these lesions is rapidly evolving and lesions previously thought benign are now recognised to present an increased risk.
2. Improving diagnostic techniques have allowed us to detect lesions previously thought radiologically invisible.
3. Non surgical biopsy techniques have improved making the morbidity of surgery less acceptable, and inevitably the lesions requiring surgery more difficult surgically.
4. As the majority of these lesions will not threaten a patients life it is a potentially complex discussion.

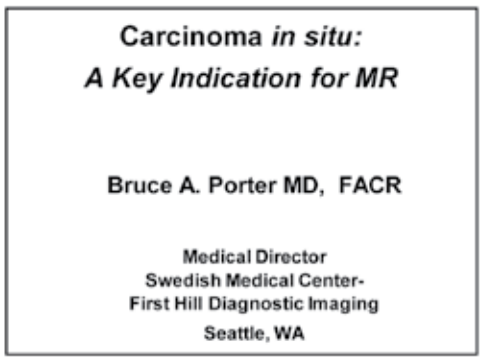
The key to management involves collaboration at all stages from diagnosis to communication of results.

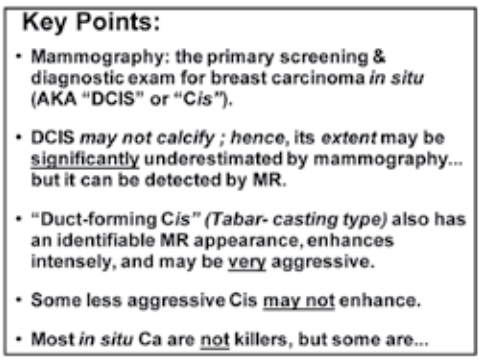
Notes

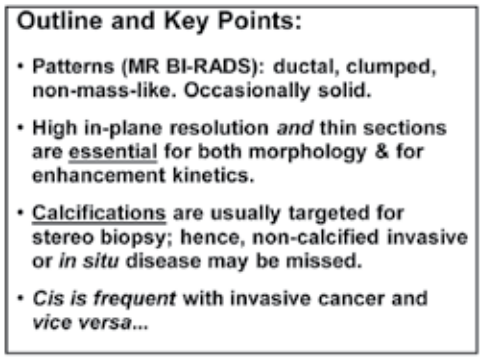
Session 2: In Situ Lesions

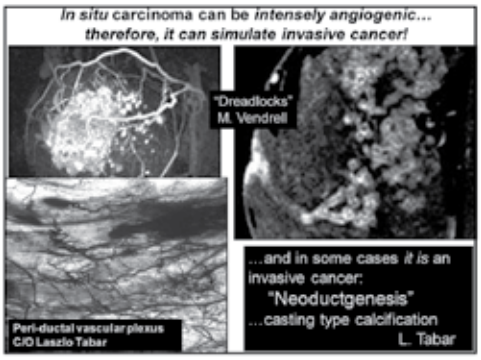
Carcinoma in situ: A key indication for MR

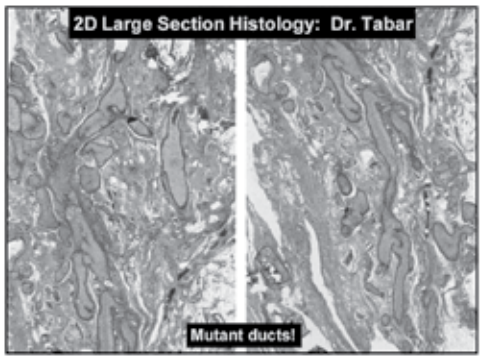
Bruce A Porter, MD

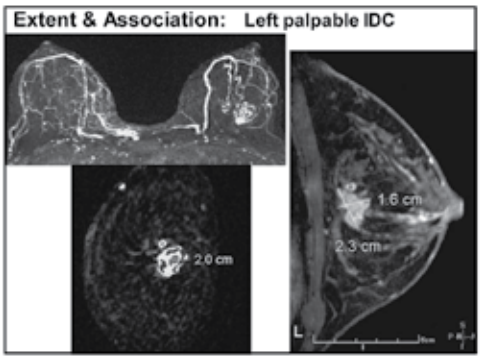












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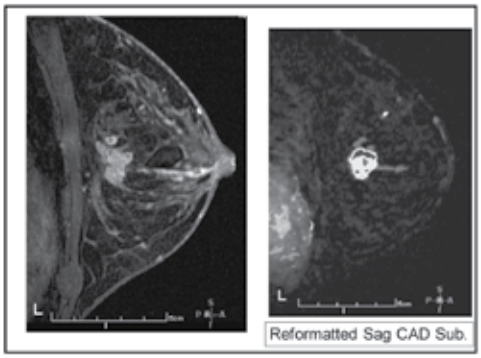
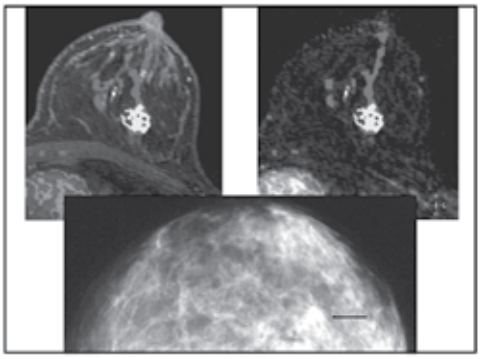
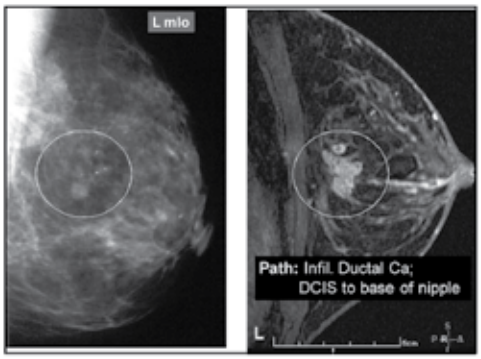
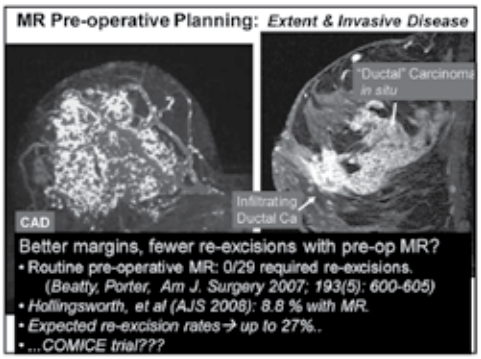
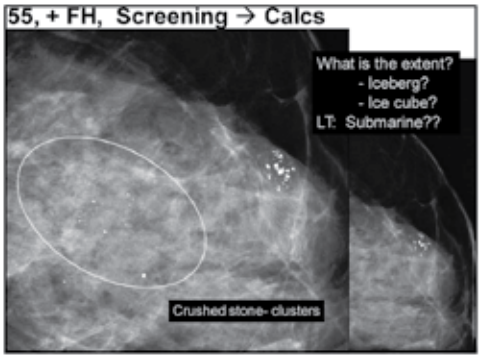
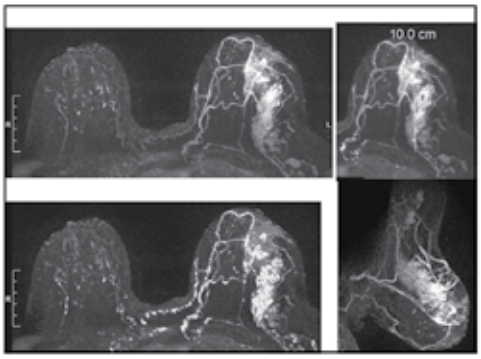

Reformatted Sag CAD Sub.



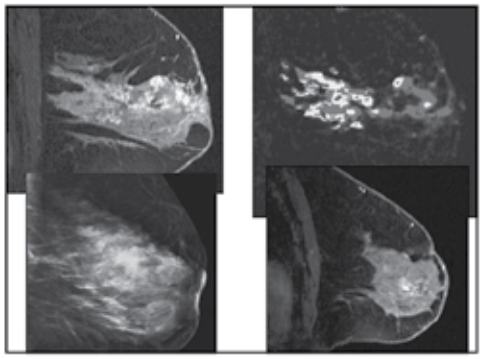

L mlo
Path: Infil. Ductal Ca;
DCIS to base of nipple

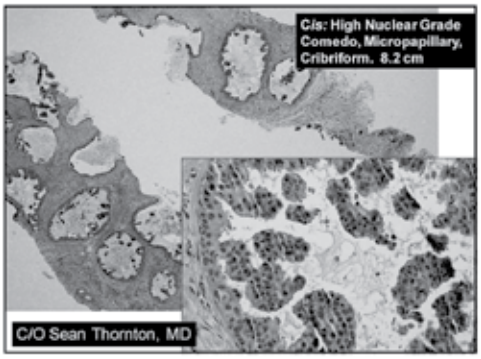

MR Pre-operative Planning: Extent & Invasive Disease
"Ductal" Carcinoma in situ
Infiltrating Ductal Ca
CAD
Better margins, fewer re-excisions with pre-op MR?
• Routine pre-operative MR: 0/29 required re-excisions.
(Beatty, Porter, Am J. Surgery 2007; 193(5): 600-605)
• Hollingsworth, et al (AJS 2008): 8.8 % with MR.
• Expected re-excision rates→ up to 27%..
• ...COMICE trial???

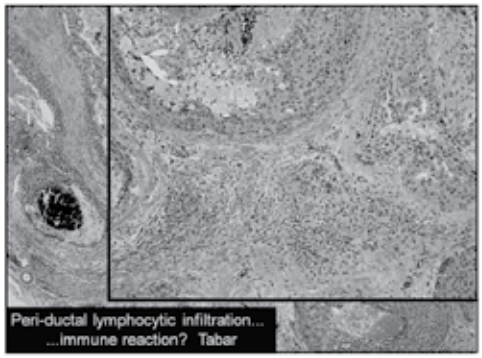

55, + FH, Screening → Calcs
What is the extent?
- Iceberg?
- Ice cube?
LT: Submarine??
Crushed stone- clusters

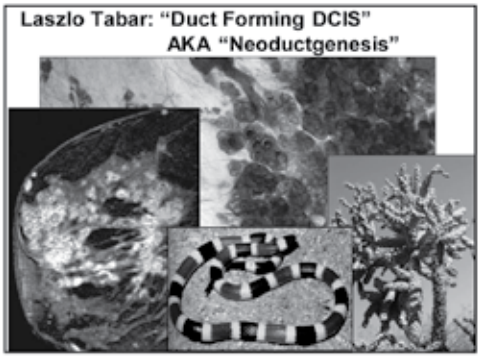

10.0 cm

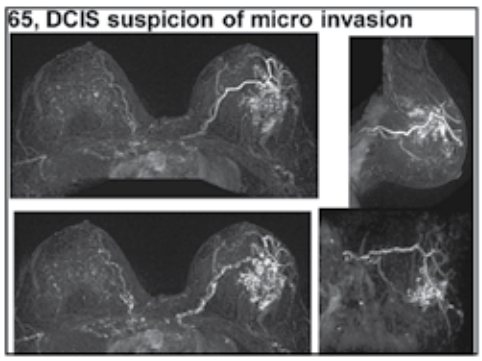
Notes

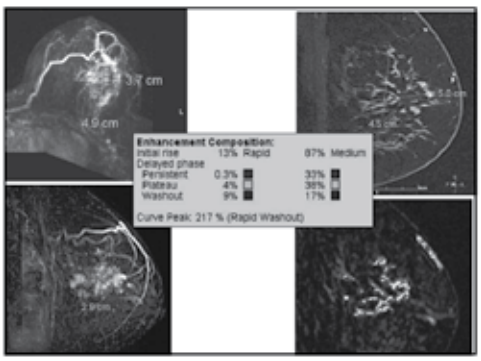



Cis: High Nuclear Grade
Comedo, Micropapillary,
Cribriform. 8.2 cm
C/O Sean Thornton, MD

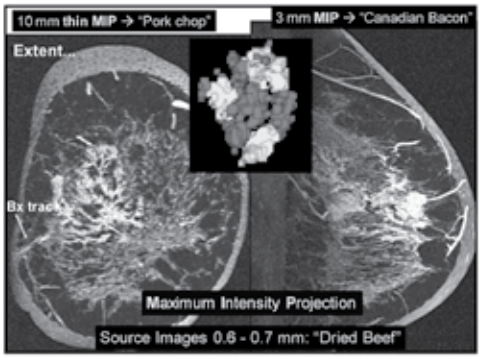

Peri-ductal lymphocytic infiltration...
...immune reaction? Tabar

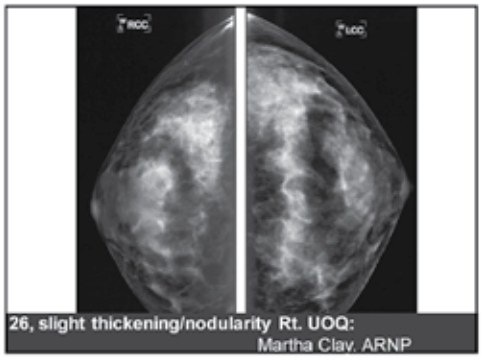

Laszlo Tabar: "Duct Forming DCIS"
AKA "Neoductgenesis"

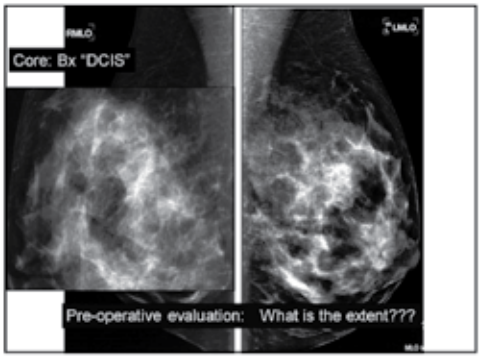

65, DCIS suspicion of micro invasion

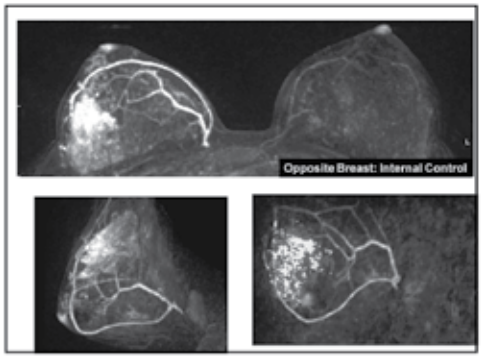

3.7 cm
4.9 cm
Enhancement Composition:
Initial rise 13% Rapid 87% Medium
Delayed phase
Persistent 0.3% 33%
Plateau 4% 38%
Washout 9% 17%
Curve Peak: 217 % (Rapid Washout)

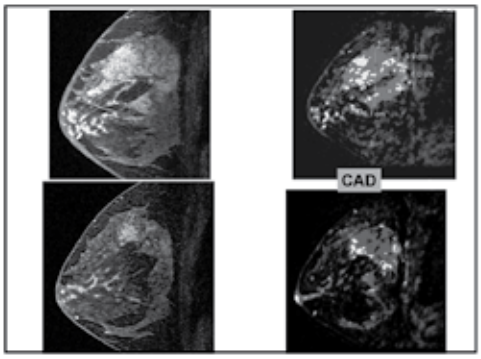
Notes

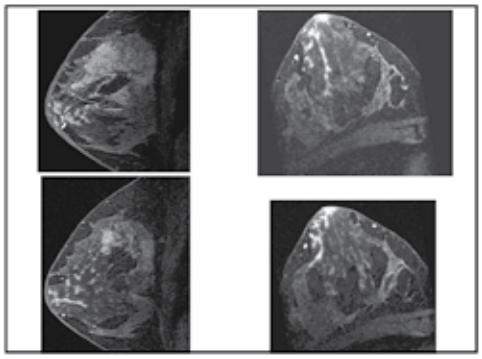

10 mm thin MIP → "Pork chop"
3 mm MIP → "Canadian Bacon"
Extent...
Bx tract
Maximum Intensity Projection
Source Images 0.6 - 0.7 mm: "Dried Beef"


RCC
LOC
26, slight thickening/nodularity Rt. UOQ:
Martha Clav. ARNP


RMLO
LMLO
Core: Bx "DCIS"
Pre-operative evaluation: What is the extent???


Opposite Breast: Internal Control


CAD



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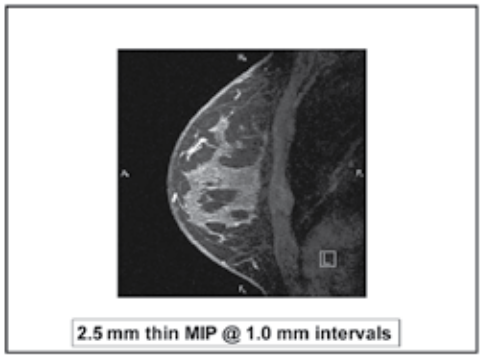
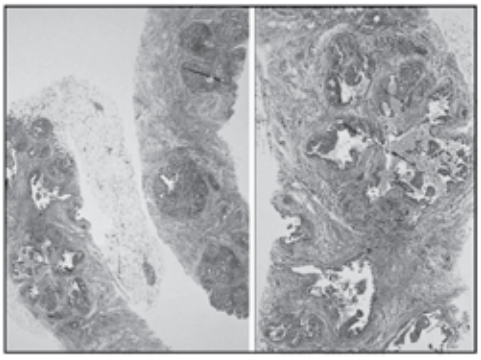
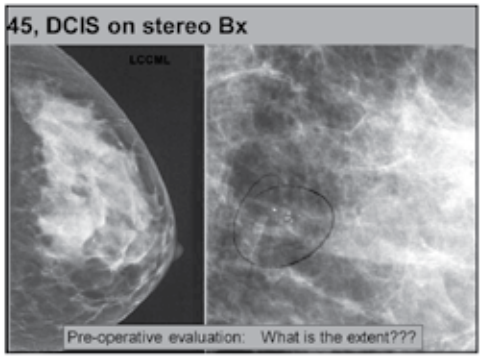
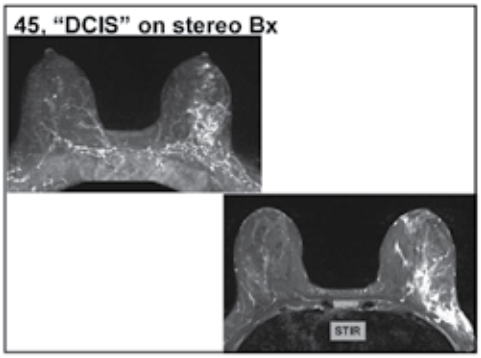
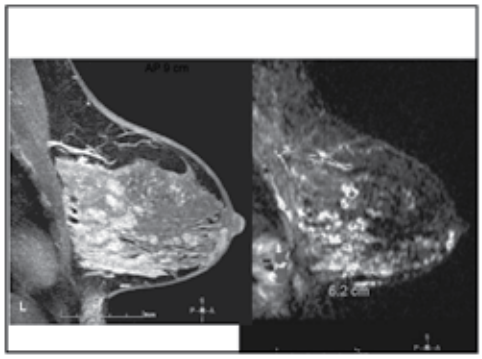
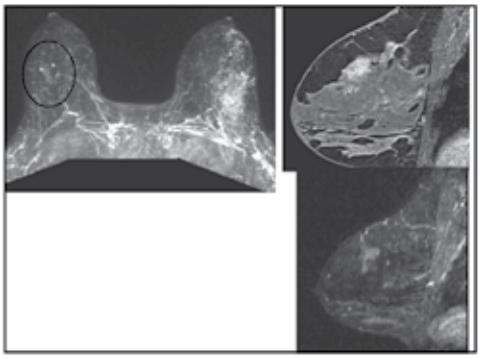

2.5 mm thin MIP @ 1.0 mm intervals




45, DCIS on stereo Bx
Pre-operative evaluation: What is the extent???


45, "DCIS" on stereo Bx
STIR





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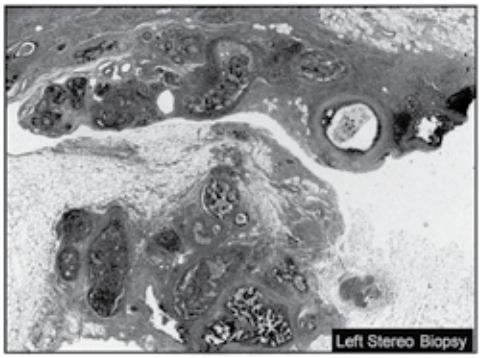
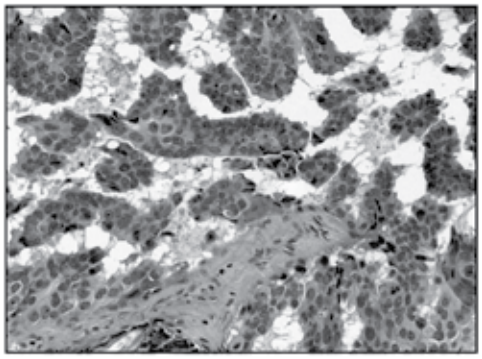
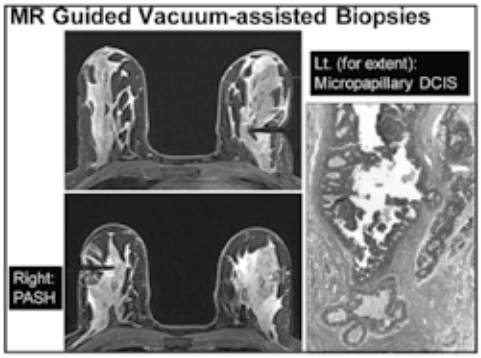
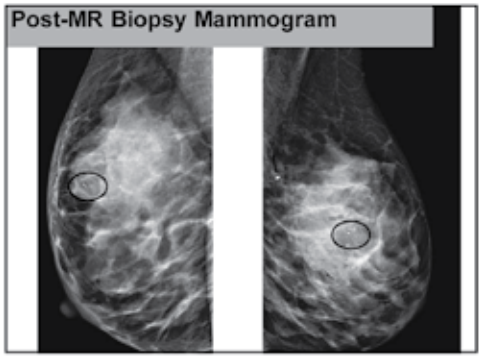


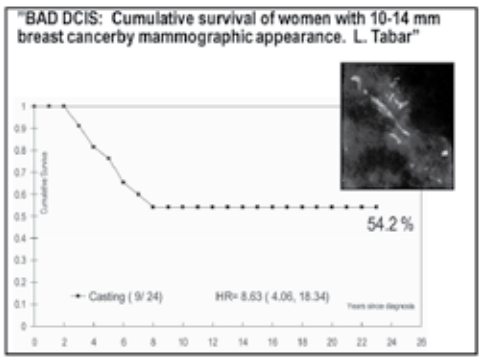






"DCIS" a killer???

- But it's *in situ*, right?
- Can it metastasize?
- Can it kill?



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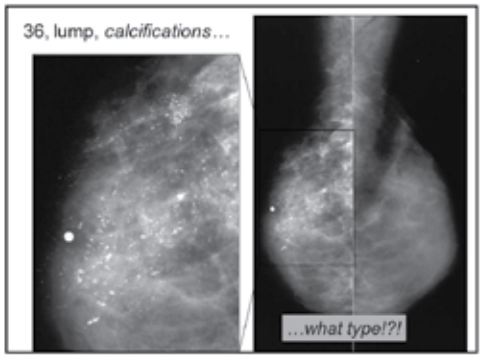

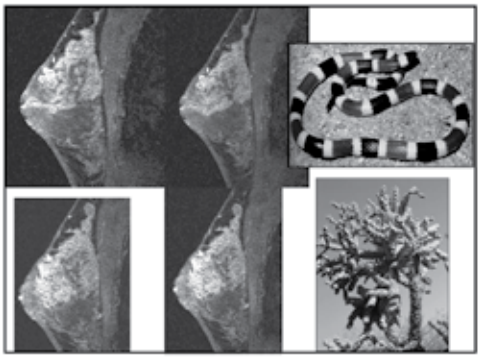

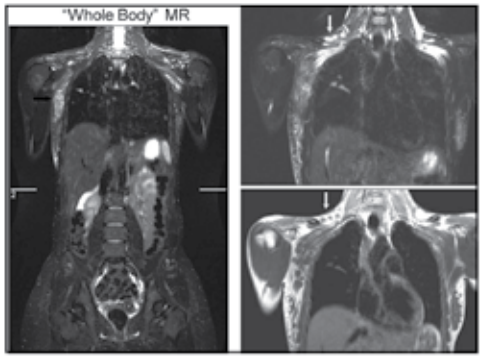

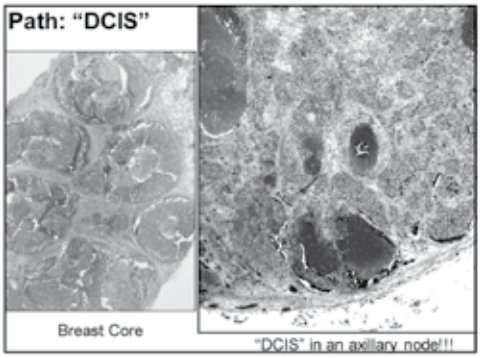

Summary: MR in Breast Carcinoma *in situ*

- **MR improves pre-operative evaluation of carcinoma *in situ*.**
- **Reveals non-calcified soft-tissue/ductal phase of C*is;* therefore, *as an adjunct to mammo*, it can lower re-excision rates.**
- **Detects concurrent invasive tumor & allows assessment of the other breast.**
- **Capable tool for staging of more aggressive forms of carcinoma *in situ*, some of which can metastasize!**

Changing face of LCIS

Sunil R Lakhani
The University of Queensland Centre for Clinical Research, The Royal Brisbane & Women's Hospital, Brisbane, Australia.

Lobular carcinoma in situ (LCIS) and invasive lobular carcinoma (ILC) are morphologically characterised by monomorphic, discohesive cells with mild nuclear atypia. Hallmark molecular features of LCIS and ILC are gain of chromosome 1q, loss of 16q and loss of E-cadherin. Loss of E-cadherin is a common feature of several types of malignancies and may explain some of the features of ILC, i.e., the discohesiveness of the cells and the typical single cell file invasion pattern, as well as the peculiar proclivity of metastatic spread to serosal cavities. Some features of LCIS (often multifocal and bilateral) are indicative of causation by germline mutation; however the target gene does not appear to be E-cadherin in most cases and is currently unknown. E-cadherin immunohistochemistry has become an adjunct diagnostic tool and led to the identification of new variants of LC.

Array CGH of microdissected synchronous LCIS and ILC demonstrated concordant molecular genetic profiles giving support to the common clonality of these lesions and to the concept of LCIS being a precursor. The unbalanced chromosomal changes observed in ALH/LCIS also overlap with those described in low-grade DCIS, suggesting a possible common genetic pathway for the development of both low-grade DCIS and ALH/LCIS.

Over the last few years, a pleomorphic variant of lobular carcinoma (PLC) has been described. In pleomorphic LCIS and ILC, neoplastic cells show the typical discohesiveness of lobular neoplasms; however, they are of high grade and show features of apocrine differentiation. Although molecular data on the PLC are scant, these tumours have overlapping genetic changes with both classic ILC and grade III invasive ductal breast carcinomas. In addition; anecdotal evidence suggests that PLC may have a more aggressive biological behaviour than ILC. Little is currently known about the other variants of lobular carcinoma.

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In-situ lesions: Management of DCIS and LCIS

David M Hyams, MD

The widespread use of mammographic screening has led to a 7-fold increase in diagnosis of duct carcinoma in situ (DCIS). This condition, characterized by a spectrum of abnormal cells, confined to the breast ducts, has frequently generated more controversy over clinical significance and treatment, than true invasive breast carcinoma. Lobular carcinoma in situ (LCIS) is a separate process that consists of abnormal cells that are discontinuous and fill and distend at least two acini of lobular units. Complicating the issue, LCIS and DCIS may co-exist.

DCIS is rarely a problem of younger women. The incidence of disease increases in women after 40, with a peak incidence in the 5th and 6th decades. In the United States, the age adjusted incidence of DCIS is 32.5/100,000 women, with over 500,000 women living with a DCIS diagnosis. Incidence studies and longitudinal studies have suggested that while some DCIS is a precursor on the road to invasive cancer, much DCIS is unlikely to progress to invasive disease and that in some DCIS, treatment could be avoided altogether. LCIS incidence has also increased with mammographic screening. However, it is no longer widely considered malignancy of the same relevance as DCIS. The term lobular neoplasia has often replaced LCIS, with the condition considered a risk-marker for concurrent or future invasive cancer development.

Prior to mammography, the diagnosis of DCIS was largely by palpation or symptom, with much of the disease presenting as the comedo variant. Modern imaging has increased the likelihood of identifying the pathologic entity, without concomitant increase in appreciation of its clinical significance. Studies have suggested that MRI may be less sensitive for some patterns of DCIS, while being more sensitive for others. However, the significance of small remote lesions of DCIS identified on MRI is uncertain. Thus, increased MRI use in the setting of DCIS and LCIS, raises the potential for over-diagnosis.

Although there are numerous pathologic subtypes of DCIS, most of these are based on descriptive information with little clear clinical correlation to outcome. An exception is the comedo subtype, which has been associated with higher local recurrence rates, and thus higher rates of development of subsequent invasive breast cancer. Some radiologists have used combinations of imaging tools and large-mount pathologic sectioning to infer clinical behavior and pathobiology. However, the greatest potential for risk stratifying DCIS, and identifying lesions requiring aggressive treatment versus active surveillance, is likely to come from the development of a robust molecular taxonomy for DCIS classification using genomic markers.

By definition, true DCIS is a non-life-threatening disease. The long-term survival rates of more than 92% in all prospective studies bear this out. And yet significant resource and emotional energy is spent in the management of this disease. Current standard of care is still based on surgical excision of all DCIS with clear margins, followed by whole breast radiation therapy or simple mastectomy. Some studies have shown that sub-groups with wide excision margins and low-grade appearing cells, do well with lumpectomy alone. It is clear that Tamoxifen can further reduce local recurrence rates in patients whose DCIS has expressed estrogen receptors, and has the added advantage of chemoprevention of contralateral breast cancer. The important remaining question is whether subgroups can be identified in which long term follow-up without surgery or radiation therapy would be sufficient. This is an area for evolving research.

Most LCIS does not currently warrant complete excision. Only if sampling error or pathologic accuracy is a concern, is surgical intervention indicated. Radiation therapy is not indicated for this condition, but chemoprevention strategies do appear to reduce the risk for future development of invasive cancer.

Microinvasive DCIS is a unique circumstance in which very small areas of invasive disease present with DCIS. Although the risk of metastasis from these T1a lesions is small, sentinel lymph node evaluation may be indicated. More challenging issues relate to the management of microinvasive disease with chemotherapeutic agents and/or biologicals such as Heceptin. In the absence of clinical trials information, any such decisions must balance the fear of distant disease against the costs and toxicities of intervention.

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Notes

Workshop: Breast reconstruction

David M Hyams, MD

Classic breast reconstruction has generally referred to the re-creation of a suitable breast mound after total or modified radical mastectomy. The techniques utilized have ranged from the straightforward sequential implantation of an inflatable saline expander and a silicone implant, to the wholesale transfer of skin, fat, and muscle tissue using microvascular anastomoses.

More recently, the term breast reconstruction has come to include techniques of oncoplastic surgery, in which plastic surgical procedures are combined with principles of classic oncologic surgery. This has lead to reformulation of incisions, the creation of internal parenchymal flaps, as well as the adoption of more extensive procedures, such as incorporating mastopexy and reduction mammaplasty into segmental breast resections.

With appropriate planning, more generous margins may be obtained, while still maintaining optimal contour. In some cases, the patient may benefit from a better cosmetic outcome than before their ablative procedure. These procedures may result in less fear, greater acceptance, and less psychic trauma then has traditionally been associated with generous segmental breast resections.

The advent of both informatics-based and BRCA-gene associated risk evaluation tools means that younger women may increasingly be apprised of high lifetime risks at an earlier age when they may be more motivated to intervene. While many of these women may choose high intensity screening and chemoprevention programs, a growing number choose to pursue prophylactic mastectomy. Even among BRCA positive women, whose lifetime risk may exceed 80%, bilateral prophylactic mastectomy may reduce that risk by 90%.

Recent studies have demonstrated the safety of skin-sparing, and now, nipple sparing mastectomy. These procedures provide options for maximally maintaining the natural skin envelope and contour, while removing the underlying breast tissue. In carefully chosen patients, these procedures may be safe for prophylactic mastectomy, but also for treatment of invasive and noninvasive cancer. Key to these procedures is assuring that malignant lesions do not directly involve the nipple. Properly performed procedures remove the ductal epithelium from the nipple, leaving behind only the squamous epithelium that lines the distal ducts.

The ability to construct infra-pectoralis "slings" with cadavaric acellular dermal matrix greatly facilitates the use of sub-pectoral expanders and implants, while maximally maintaining more natural inferior and lateral breast contour. Such procedures assure that the implant is completely covered, minimizing the risk of implant exposure and infection. With these tools, and appropriate training and attention to detail, the breast surgical specialist can safely and effectively manage simultaneous resection and reconstruction, saving time, money, and considerable patient distress.

For those patients wishing the most natural reconstructive appearance after mastectomy, myocutaneous transposition flaps and free flaps remain the gold standard. However, these procedures are complex and time consuming, and require much more extensive training and experience than expander-based reconstruction. Such procedures, ideal for the younger larger breasted woman, are best performed in a collaborative fashion with a suitable reconstructive plastic surgeon.

During this workshop on breast reconstruction we will discuss the indications, techniques, and pitfalls of modern oncoplastic surgery with attendees.

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Notes

Implant / expander reconstruction of the breast

John Harman

Over the last five years 168 reconstruction surgeries have been performed at St Marks. Over 50% of thee were TRAM flaps. One third of all breast reconstructions were expander reconstructions. Of these, a quarter were bilateral. Of the bilateral reconstructions one quarter of these patients were diagnosed as BRACA1 or 2 positive.

Expander reconstruction has several obvious advantages. For the patient they see less scarring, less post operative time in hospital and less upset to their post operative convalescence. To the insurance companies there is the attraction that this procedure requires less time in hospital and less operating time. However, there is a high risk of complications with this procedure and when studies have looked at the cost benefit analysis they show that because there are a large proportion of re-operative procedures, implant failure and cosmetic failure the cost benefit analysis means that TRAM, latissimus dorsi and expander reconstructions have a similar benefit cost wise. In this paper I will seek to tease out the areas of controversy in association with expander reconstruction which include:

1. One or two stage reconstruction.
2. The management of the contra-lateral breast.
3. The management of complications.
4. The cosmetic outcomes.

Portocath

Stan Govender

Portocath insertion is traditionally associated with a visible scar in the upper chest wall which for the female breast cancer patient has become unacceptable especially given the excellent aesthetic results provided by immediate breast reconstruction. A technique is presented here for the insertion through a hidden circumareolar incision and provides a step by step guide to adopting this technique in your practice and highlights an early problem encountered with it.

Notes

Workshop: Molecular pathology

Sunil R Lakhani
The University of Queensland Centre for Clinical Research, The Royal Brisbane & Women's Hospital, Brisbane, Australia.

The molecular pathology workshop will be divided into 3 sections with discussions on Immunohistochemistry, Genomic and Expression analysis.

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Workshop: MR breast technique

Bruce Porter

Workshop: MR breast reporting

Sponsored by Imaxeon

Bruce Porter

Notes

Workshop: Conjoined surgery and pathology – Understanding each other

David Hyams, Sunil Lakhani, Stephen Allpress

Notes

Workshop: Is breast cancer a lifestyle disease?

Is breast cancer a lifestyle disease?

Dallas English

Several lifestyle factors increase or decrease the risk of breast cancer. While there are no strong dietary risk factors, alcohol consumption slightly increases the risk. There is weak evidence that folate consumption might counteract the effect of alcohol. Physical activity appears to decrease the risk. Obesity is associated with increased risk of breast cancer for postmenopausal women, but not for premenopausal women. Exogenous oestrogens increase the risk of breast cancer. Reproductive factors are not often considered as lifestyle factors, but have long been known to be associated with risk.

The importance of psychological factors

Geraldine Meechan

Exercise after Breast Cancer

Lou James

Complementary therapies - the science

Sean Holt

Almost everyone with a diagnosis of cancer will either use or consider complementary therapies. Complementary therapies are those treatments that work alongside conventional medical treatments, and while they cannot cure cancer, they can play a significant part in supporting cancer patients through their fight with the disease. But deciding what complementary therapies actually work is extremely difficult, and this is what medical researcher and doctor Professor Shaun Holt tackles in this presentation. An overview will be given of which therapies are likely to help and the argument will be made that these hugely important health choices should be based on good medical research, not anecdotes. Topics covered include evidence-based therapies such as acupuncture, massage, meditation, yoga hypnosis and the effectiveness of herbal remedies such as St John's Wort, ginger and capsicum. Importantly, the presentation will also look at many commonly used therapies which are unlikely to help, or worse, will actually cause harm.

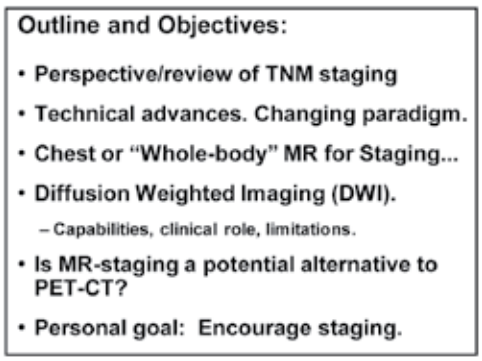
Session 3: Invasive Breast Disease I

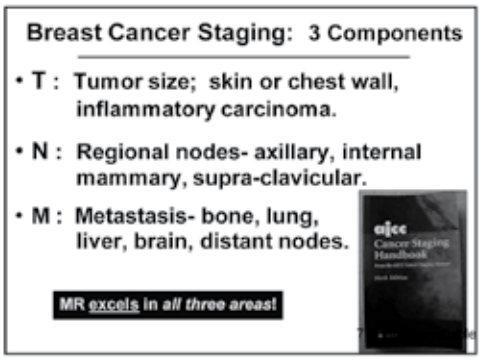
Sponsored by Novartis Oncology

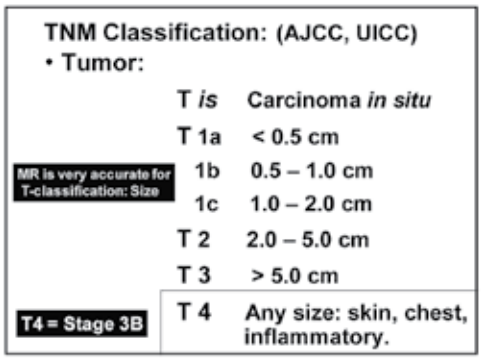
Notes

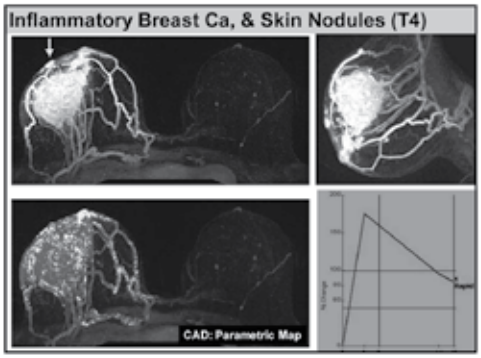
MR staging of breast cancer

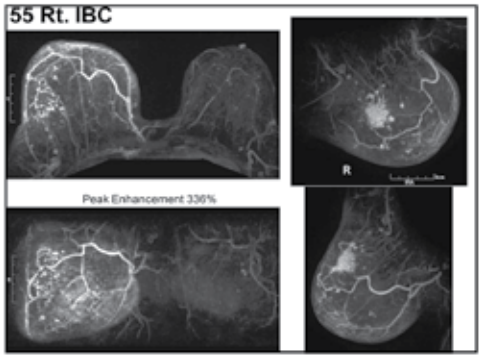
Bruce Porter











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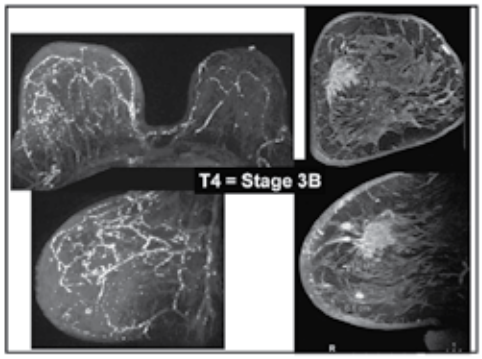
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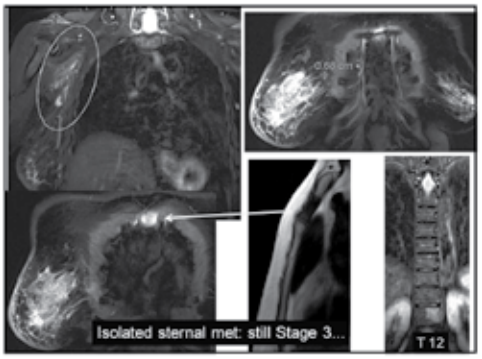
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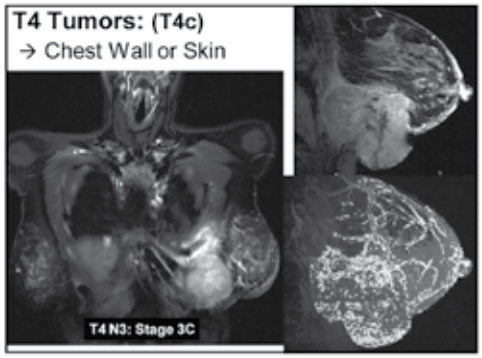
T12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→ Chest Wall or Skin
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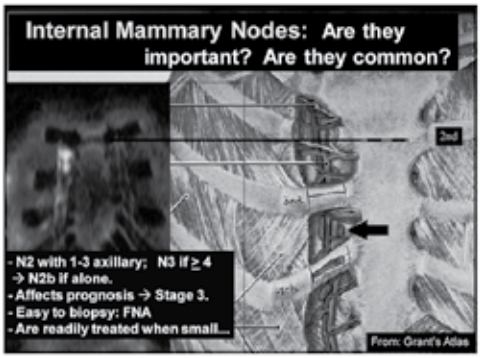
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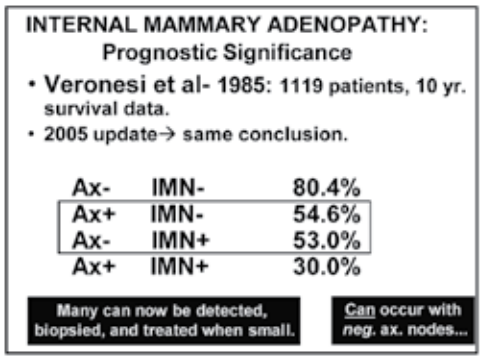
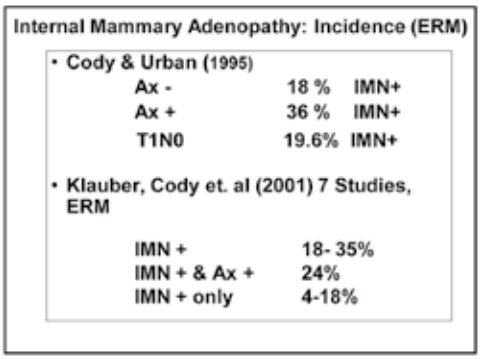
- N2 with 1-3 axillary; N3 if ≥ 4
→ N2b if alone.
- Affects prognosis → Stage 3.
- Easy to biopsy: FNA
- Are readily treated when small...
From: Grant's Atlas


INTERNAL MAMMARY ADENOPATHY:
Prognostic Significance
• Veronesi et al- 1985: 1119 patients, 10 yr. survival data.
• 2005 update→ same conclusion.
Ax- IMN- 80.4%
Ax+ IMN- 54.6%
Ax- IMN+ 53.0%
Ax+ IMN+ 30.0%
Many can now be detected, biopsied, and treated when small.
Can occur with neg. ax. nodes...


Internal Mammary Adenopathy: Incidence (ERM)
• Cody & Urban (1995)
Ax - 18 % IMN+
Ax + 36 % IMN+
T1N0 19.6% IMN+
• Klauber, Cody et. al (2001) 7 Studies, ERM
IMN + 18- 35%
IMN + & Ax + 24%
IMN + only 4-18%

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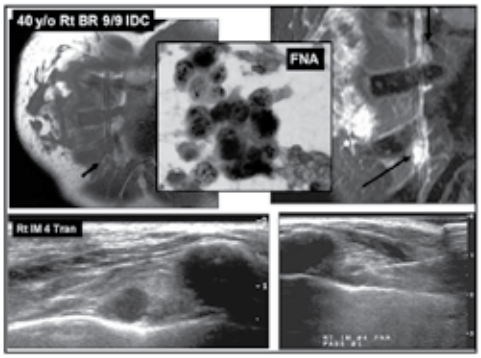
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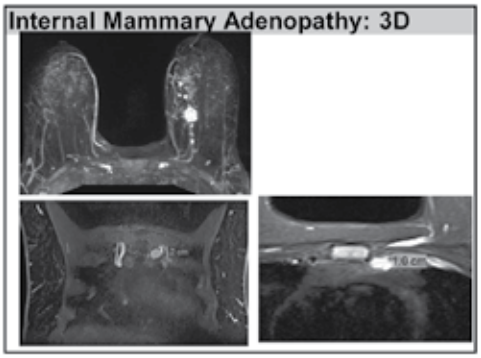
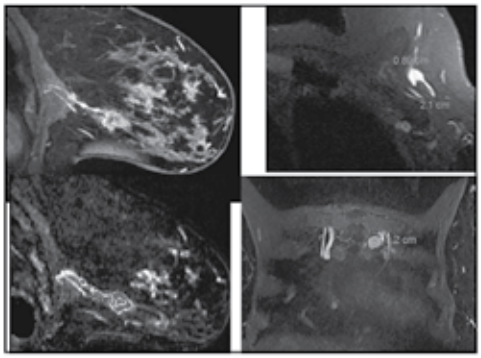
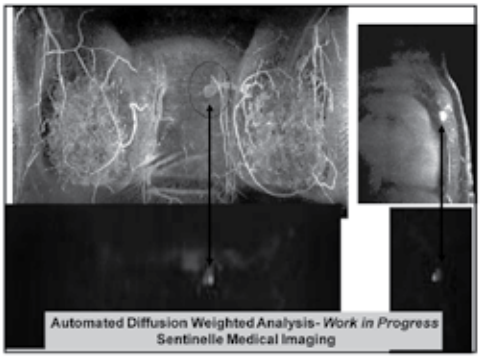
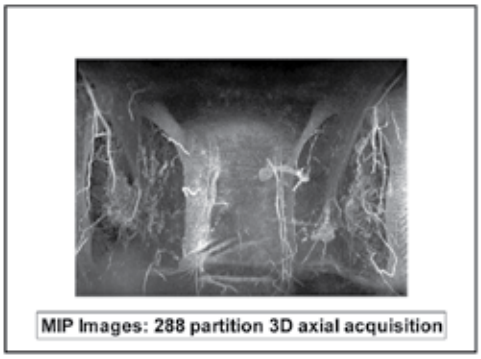
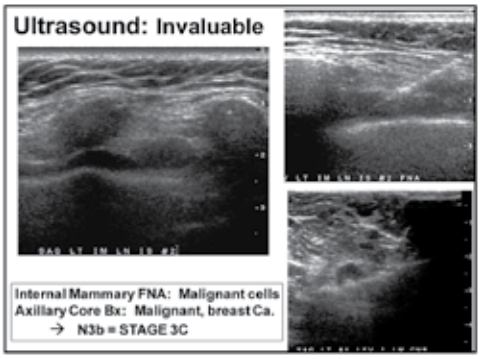
Rt IM 4 Tran


Internal Mammary Adenopathy: 3D

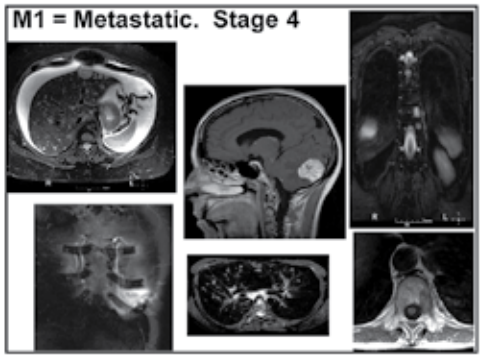


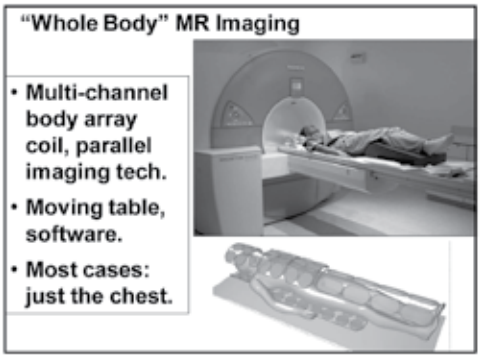

Automated Diffusion Weighted Analysis- *Work in Progress*
Sentinelle Medical Imaging

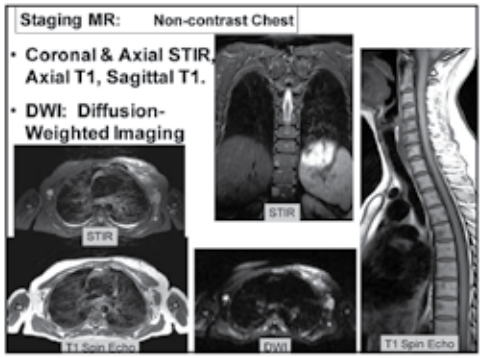

MIP Images: 288 partition 3D axial acquisition

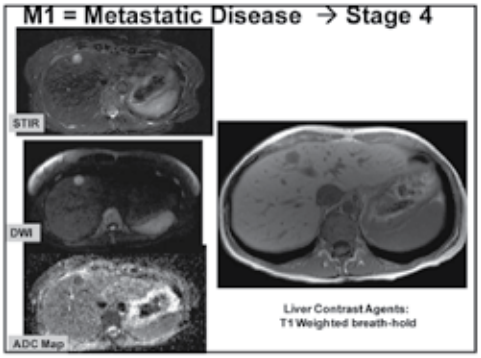

Ultrasound: Invaluable
Internal Mammary FNA: Malignant cells
Axillary Core Bx: Malignant, breast Ca.
→ N3b = STAGE 3C

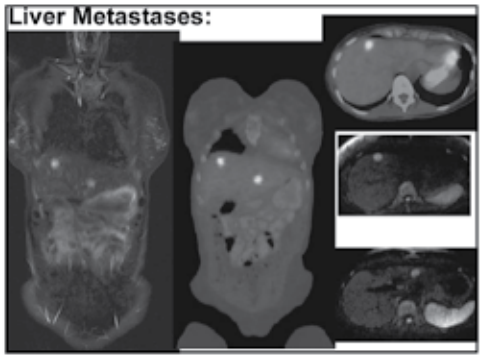
Notes

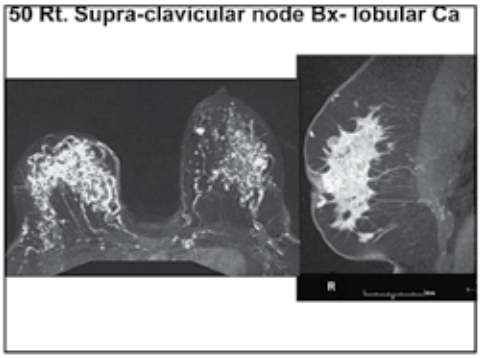

M1 = Metastatic. Stage 4


"Whole Body" MR Imaging
• Multi-channel body array coil, parallel imaging tech.
• Moving table, software.
• Most cases: just the chest.

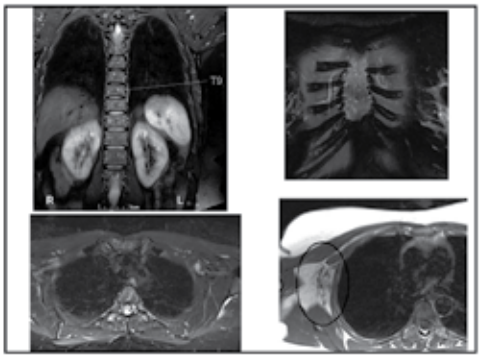

Staging MR: Non-contrast Chest
• Coronal & Axial STIR, Axial T1, Sagittal T1.
• DWI: Diffusion-Weighted Imaging
STIR
STIR
T1 Spin Echo
DWI
T1 Spin Echo

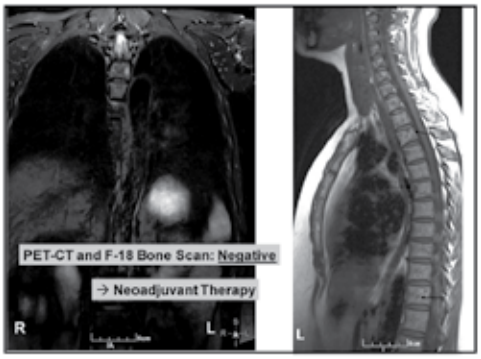

M1 = Metastatic Disease → Stage 4
STIR
DWI
ADC Map
Liver Contrast Agents:
T1 Weighted breath-hold

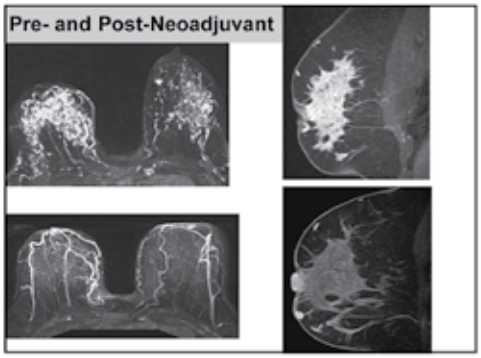

Liver Metastases:

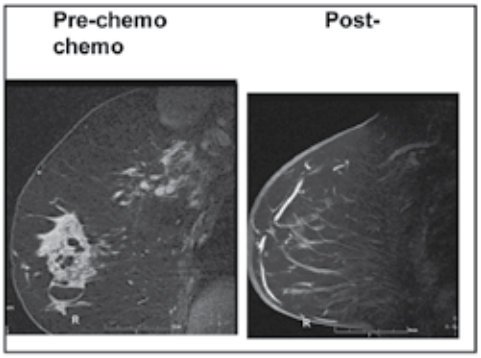

50 Rt. Supra-clavicular node Bx- lobular Ca

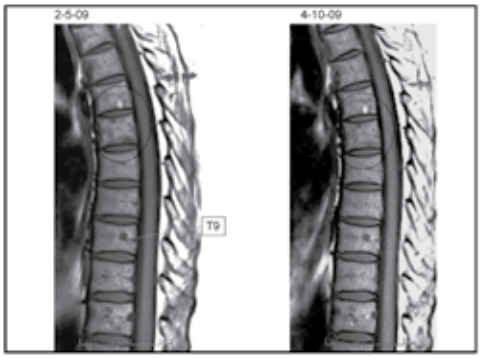
Notes

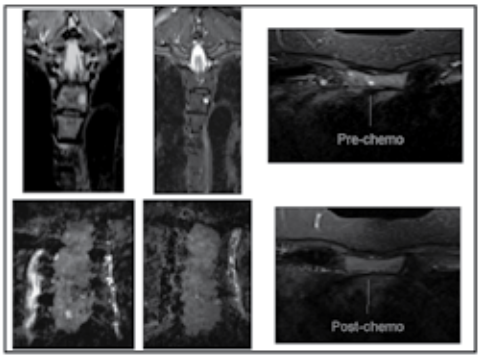



PET-CT and F-18 Bone Scan: Negative
→ Neoadjuvant Therapy
R
L
L

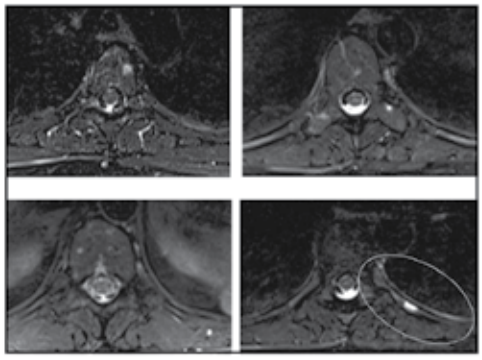

Pre- and Post-Neoadjuvant

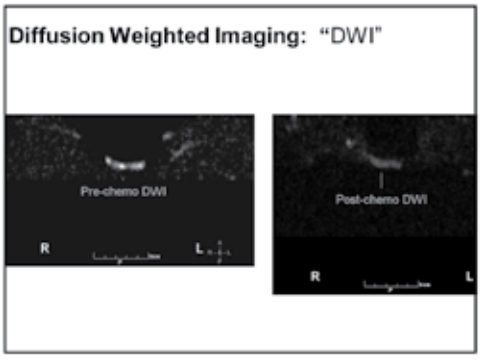

Pre-chemo
Post-chemo
R
R

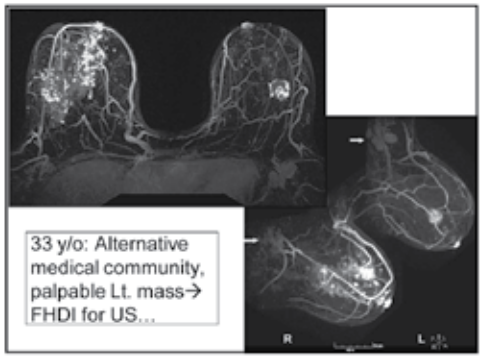

2-5-09
4-10-09
T9

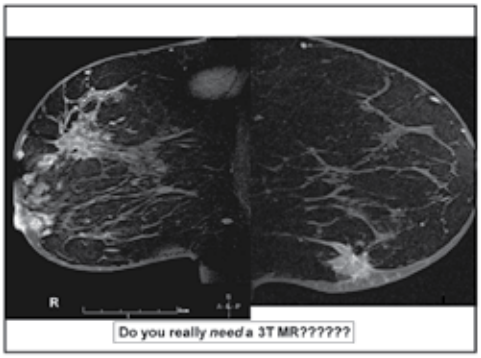

Pre-chemo
Post-chemo

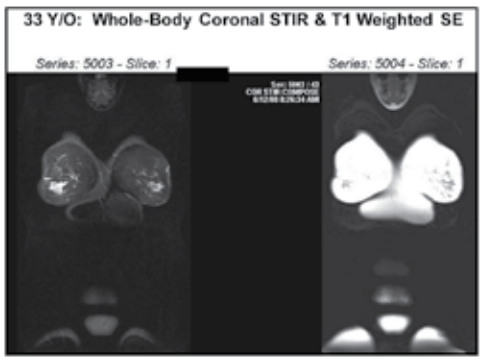
Notes

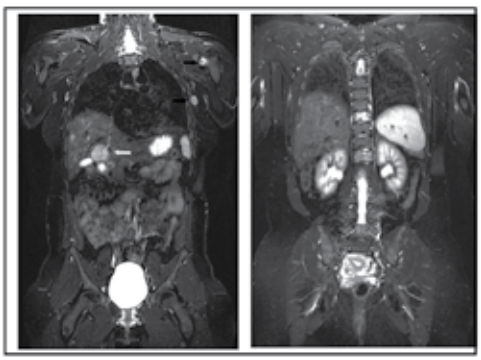



Diffusion Weighted Imaging: "DWI"
Pre-chemo DWI
Post-chemo DWI
R
L
R
L


33 y/o: Alternative medical community, palpable Lt. mass→ FHDI for US…
R
L


R
Do you really need a 3T MR??????


33 Y/O: Whole-Body Coronal STIR & T1 Weighted SE
Series: 5003 - Slice: 1
Series: 5004 - Slice: 1



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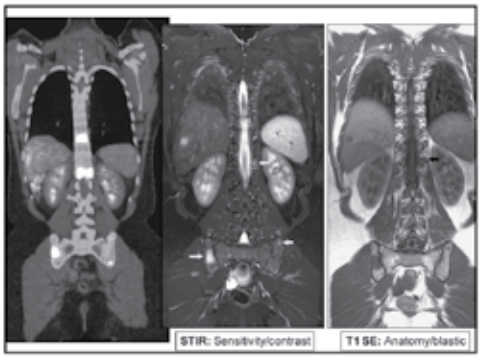

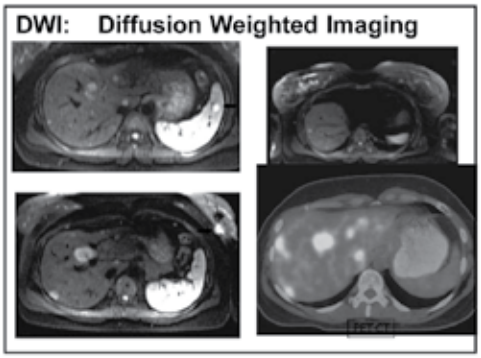

SUMMARY & CONCLUSIONS:

- MR is a *very* capable tool for T, N, and M *cancer* staging.
- *No radiation exposure.*
- Whole body imaging should expand the role of MR in breast cancer evaluation.
- Body MR is a potential alternative to PET-CT for staging of breast cancer.

Notes

What's new in radiology?

Anthony Doyle

Breast imaging still relies heavily on mammography, which has certain limitations including radiation, discomfort and low sensitivity and specificity under certain conditions. Despite these and rapid advances in both ultrasound and MRI, it is likely that x-ray mammography will be the mainstay of breast imaging for the near future. This talk will focus on current and pending enhancements to mammography, including tomosynthesis, computed tomography, compounding with ultrasound and nuclear medicine, image registration and computer aided diagnosis. The relationship of these to other modalities including ultrasound and MRI will also be discussed.

Neoadjuvant therapy for Breast Cancer

Robin Stuart-Harris
Medical Oncology Unit, The Canberra Hospital, Woden, ACT..

Neoadjuvant therapy was introduced in the early 1970s and initially was used in patients with inoperable, locally advanced tumours. Early experience with neoadjuvant chemotherapy demonstrated that high response rates of up to 90% could be achieved allowing mastectomy or local excision in patients achieving a good response. Subsequently, neoadjuvant chemotherapy was extended to patients with large, but potentially operable tumours. Although neoadjuvant chemotherapy induces response in the majority of patients, pathological complete remission (pCR) only occurs in up to 15% of patients. The best long term outcomes are achieved by those patients attaining pCR. Neoadjuvant chemotherapy regimens are similar to those used in postoperative adjuvant chemotherapy. A meta-analysis[1] showed no significant differences in survival or disease progression between neoadjuvant and postoperative adjuvant chemotherapy, but did show increased local recurrences after neoadjuvant chemotherapy, probably because women attaining a pCR received radiotherapy alone and not surgery. Subsequently, neoadjuvant therapy was extended to endocrine therapy for selected patients presenting with hormone receptor positive tumours.

Neoadjuvant therapy offers a number of opportunities but also poses challenges. Firstly, neoadjuvant therapy allows the use of systemic therapy upfront, avoiding the delay that occurs with postoperative adjuvant therapy. Secondly, neoadjuvant therapy allows an assessment of whether the therapy is successful, or not. If the neoadjuvant therapy is successful, then the same agent(s) can be used, postoperatively. Tumour biopsies prior to and during therapy and tumour histology at excision provide an opportunity to study the tumour and proliferative markers, such as Ki-67. The serial use of proliferative markers can indicate early whether the tumour is likely to respond, or not. Radiological assessment is important and MRI can be especially useful. Attainment of pCR remains the most powerful prognostic factor for disease free survival and survival. The principal function of neoadjuvant therapy remains the downstaging of large tumours.

Reference:

1. Mauri D, Pavlidis N, Ioannidis JPA. Neoadjuvant versus Adjuvant Systemic Treatment in Breast Cancer: A Meta-Analysis. *J Natl Cancer Inst* 2005; **97**: 188-94.

Session 4: Invasive Breast Disease II

Sponsored by AstraZeneca Oncology

Notes

What's new in medical oncology?

Reuben Broom

Two of the most aggressive breast cancer subtypes are the Her-2/neu positive and triple negative / basal like tumours. Trastuzumab has revolutionalised the treatment of the Her-2/neu positive group, however, despite its use, these tumours can develop resistance to it. There are now a quiver of novel agents directed at different parts of the Her-2/neu receptor and these will be discussed. Until recently we have lacked a specific target for the triple negative / basal like tumours. PARP has now been identified as pivotal for the survival of these tumours and there are now PARP inhibitors in late-stage clinical trials for this subgroup which show enormous promise. Some patients with bone metastases continue to exhibit destruction of the bones despite potent osteoclast inhibition with bisphosphonates. Several novel agents for bone metastases have been developed included the anti- RANK ligand inhibitor denosumab. These will be discussed.

What's new in radiation oncology?

Chellaraj S. Benjamin
Auckland Radiation Oncology, Auckland, New Zealand.

Radiation treatment plays an important role in breast cancer management. The technology has improved considerably in the last five years.

There are some 'inherent variability in the individuals' treatment. These include patient position, shape, movement during patient set up. Intensity modulated radiation treatment (IMRT), Image guided radiation treatment (IGRT) and Volumetric modulated arc therapy (VMAT) are recent advances in radiation oncology. They provide dose sparing of the organs at risk while maximizing the target volume dose.

A number of studies in recent years have detailed the rationale for, and various technical considerations of partial breast irradiation for early breast cancer.

Accelerated partial breast irradiation can be delivered with interstitial brachytherapy, intracavity brachytherapy or three-dimensional conformal external beam techniques.

The early results are good and we should wait for the long term results from big studies.

Notes

Molecular biology and the surgeon: A curiosity, or the future of breast cancer care?

David M Hyams, MD

For more than 100 years, pathologists have refined the description and sub-categorization of invasive breast cancer, deriving clinical significance from observational and correlative studies of outcome. In recent years, more sophisticated staining tools have augmented the art of subjective interpretation. However, most sub-types represent a spectrum of tumors with varied individual risk and even more varied individual response to therapeutic intervention.

The advent of high-throughput gene expression assay technology has revolutionized risk and response assessment in breast cancer. By understanding which genes are expressed at which levels, it has become possible to interrogate core activities of tumor cells. By grouping tumors with similar patterns of gene expression, patients may be allocated into unique biological subgroups, each with different intrinsic risks and biological behaviors.

Alternatively, using pre-determined outcome classifiers, tumors may be sorted against a particular outcome. These values for gene expression associated with a specific outcome may be weighted to produce a score which may be highly prognostic for recurrence. In some cases, these scores may further provide insight into an individual tumor's response to a broad class of systemic therapy. These "recurrence scores" may then have predictive, as well as prognostic value.

However, most of today's scoring systems are based upon correlations between an outcome classifier and a basket of genes that are most amenable to reliable measurement. Although these genes may be associated with outcome, they may not determine it. Of far greater value may be those genes that code for key checkpoint proteins, and actually govern vital pathway function.

Understanding how target genes are affected by specific pharmaceutical agents is an important step in developing any new therapeutic compound. Understanding how alternate, or redundant pathways are activated is an equally important step in mitigating resistance. But truly understanding how families of critical genes control key cellular pathways and their alternates will provide the best way forward for the development of more effective less toxic combinations of new targeted therapeutics.

Because of the need for sequential tissue acquisition, surgeons have a unique opportunity to participate, if not lead, future cancer drug development. Surgical practitioners have access to patients with newly diagnosed solid tumors, and have a window of time between diagnosis and definitive surgery when they can test new agents. These "window-of-opportunity" trials should allow rapid iterative studies to look at drug optimization and combinatorial therapy. Best of all, the agents would be tested in untreated tumors, prior to the induction of the multiple resistance pathways often seen in more advanced disease.

In order to pursue such tissue-oriented early cancer drug development, highly efficient new models of clinical research must be developed. At the same time, there will be a need for well-validated and widely accepted surrogate endpoints that can quantify treatment effect. Such testing is likely to be the only way that a broad number of targeted agents can efficiently move forward and still fulfill the promise of less toxic, more effective therapy.

Bibliography

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13. Alizadeh AA, Ross DT, Perou CM, van de Rijn M. Towards a novel classification of human malignancies based on gene expression patterns. *J Pathol*. 2001 Sep;195(1):41-52. Review. PubMed PMID: 11568890.

Workshop: Pathology

Sunil Lakhani

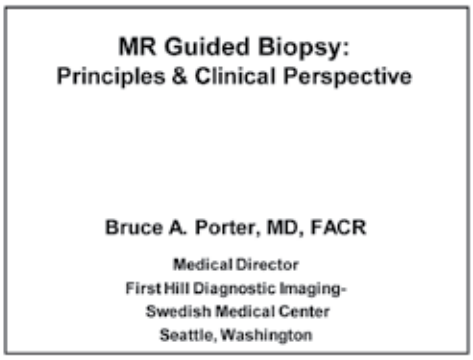
Notes

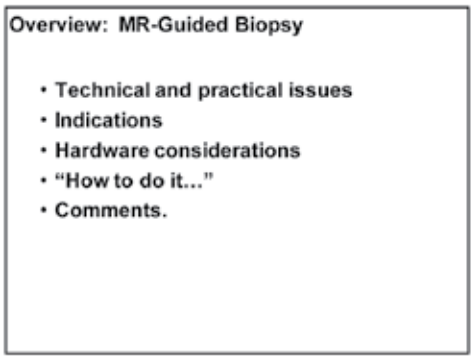
Notes

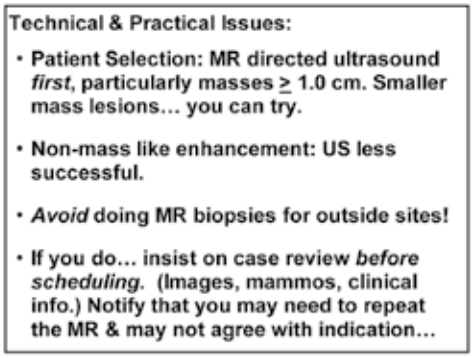
Workshop: MR guided biopsy

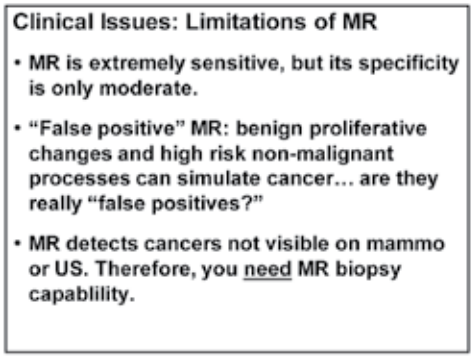
Sponsored by Hologic

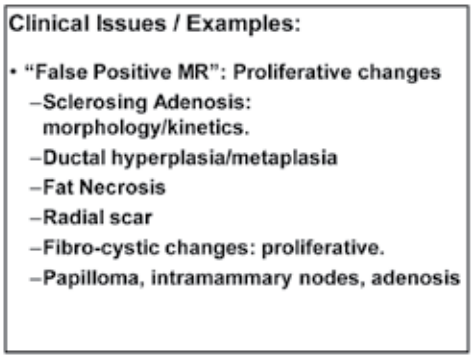
Bruce Porter

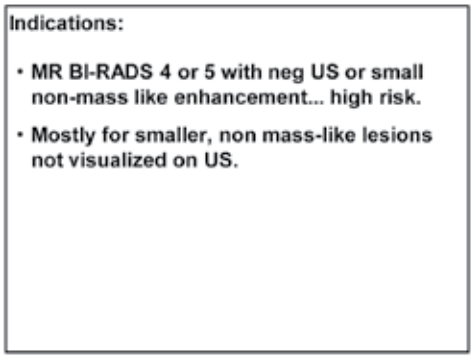












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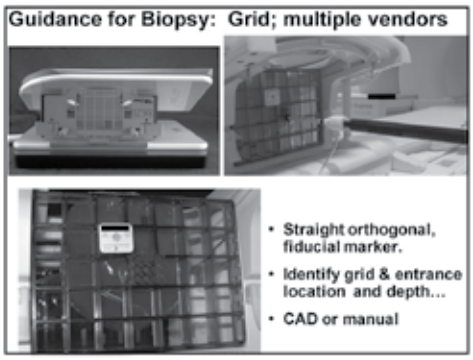
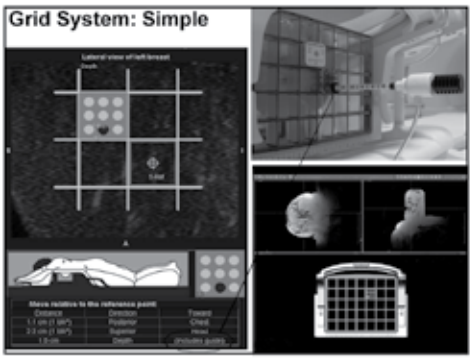
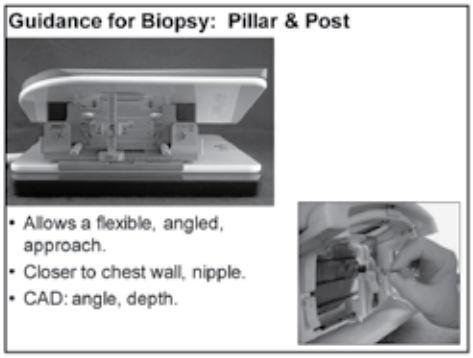
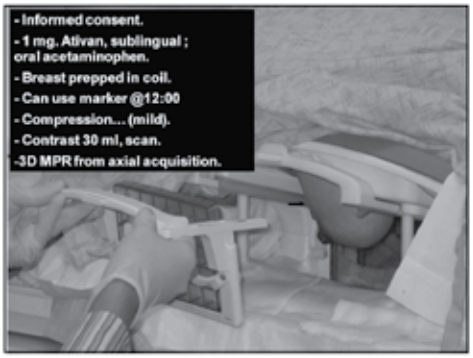
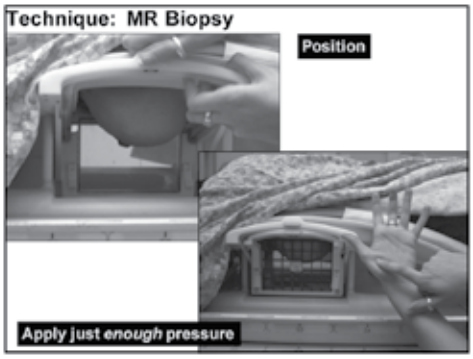
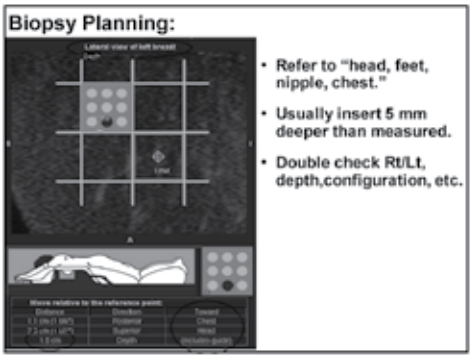

Guidance for Biopsy: Grid; multiple vendors
• Straight orthogonal, fiducial marker.
• Identify grid & entrance location and depth…
• CAD or manual


Grid System: Simple


Guidance for Biopsy: Pillar & Post
• Allows a flexible, angled, approach.
• Closer to chest wall, nipple.
• CAD: angle, depth.

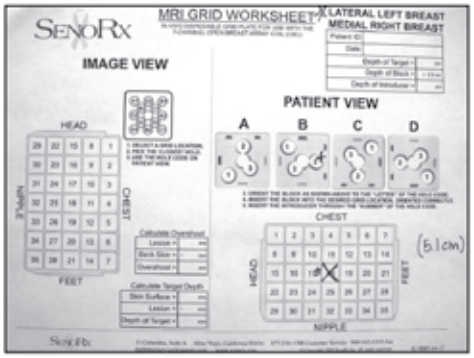

- Informed consent.
- 1 mg. Ativan, sublingual ; oral acetaminophen.
- Breast prepped in coil.
- Can use marker @12:00
- Compression.... (mild).
- Contrast 30 ml, scan.
-3D MPR from axial acquisition.

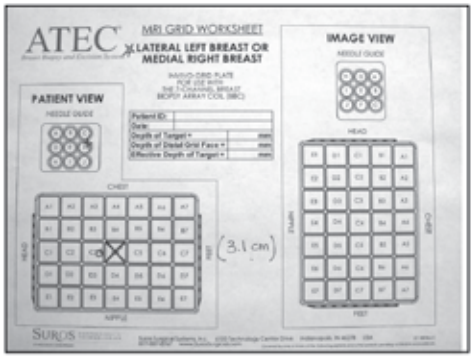

Technique: MR Biopsy
Position
Apply just enough pressure

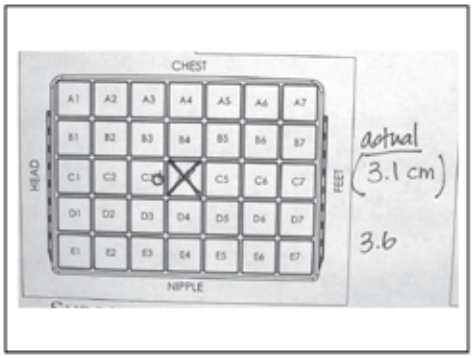

Biopsy Planning:
• Refer to "head, feet, nipple, chest."
• Usually insert 5 mm deeper than measured.
• Double check Rt/Lt, depth,configuration, etc.

Notes

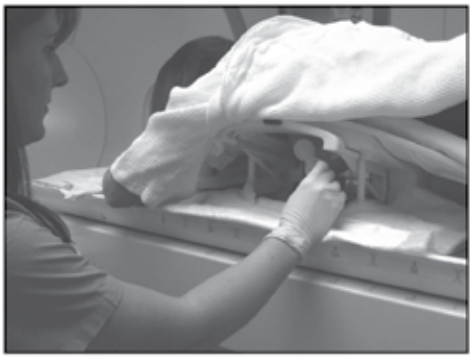

FIRST HILL
Diagnostic Imaging

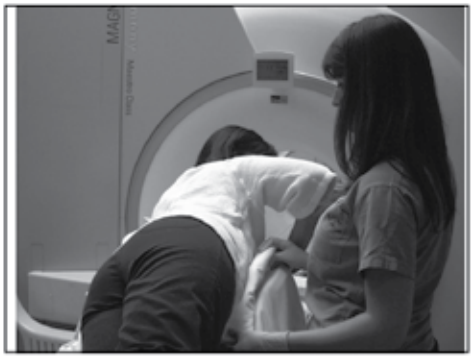

SENORX
MRI GRID WORKSHEET
LATERAL LEFT BREAST
MEDIAL RIGHT BREAST
IMAGE VIEW
PATIENT VIEW
HEAD
CHEST
FEET
NIPPLE
A
B
C
D
(5.1cm)

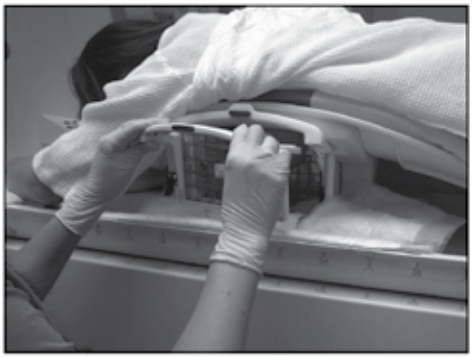

ATEC
MRI GRID WORKSHEET
LATERAL LEFT BREAST OR
MEDIAL RIGHT BREAST
IMAGE VIEW
PATIENT VIEW
(3.1 cm)

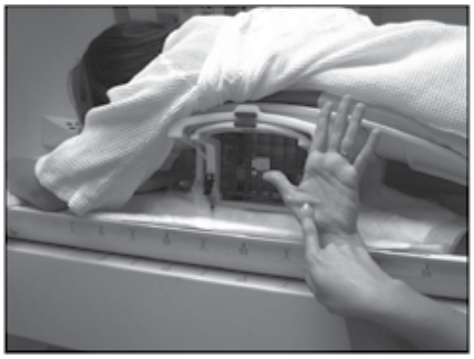

CHEST
HEAD
FEET
NIPPLE
actual
(3.1 cm)
3.6

Notes









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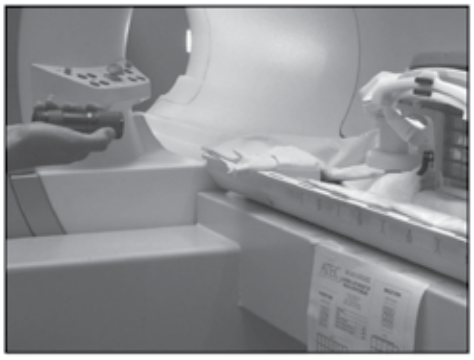
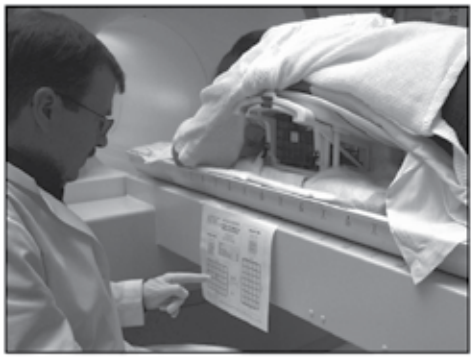
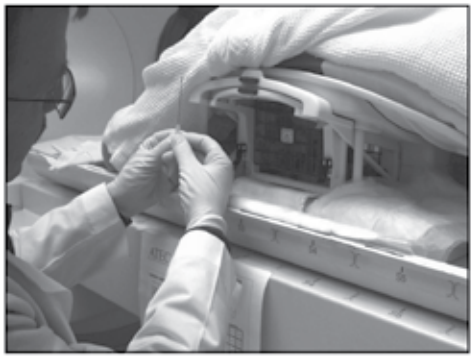


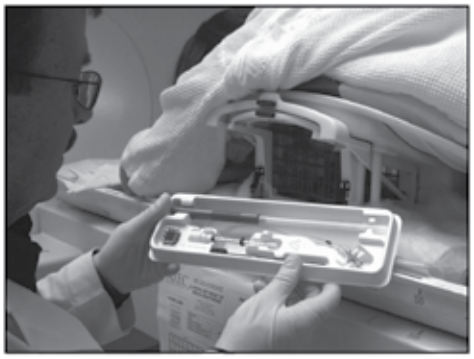



Lidocaine: Buffered
- Superficial: W/O
- Deep: Epinephrine

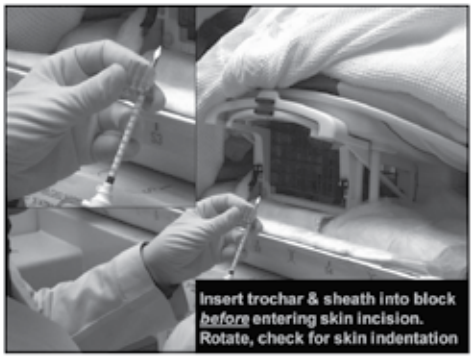


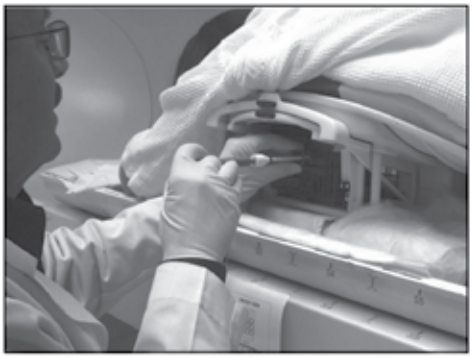

Incision: Extend 2 mm
Remember:
Remove Fiducial

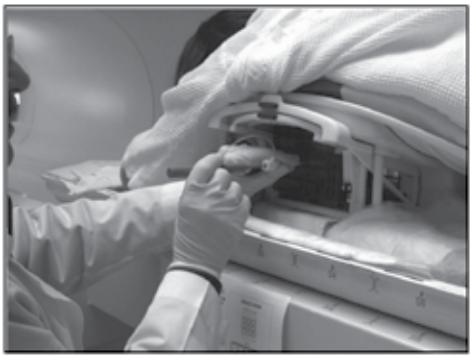
Notes




Pre-fill tubing & sheath

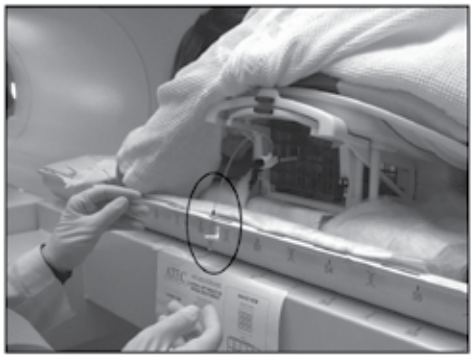

Insert trochar & sheath into block
before entering skin incision.
Rotate, check for skin indentation

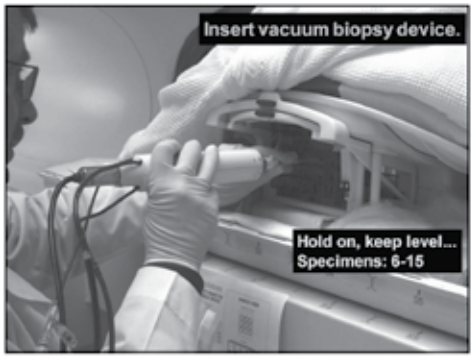




Notes


Insert obturator and scan.
Review for position/depth.

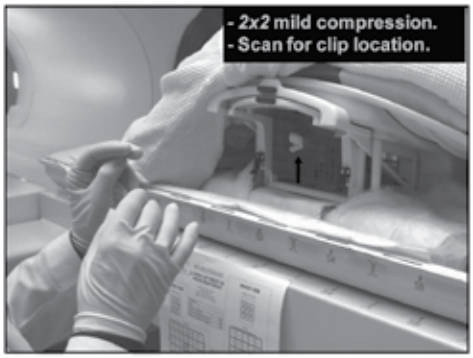


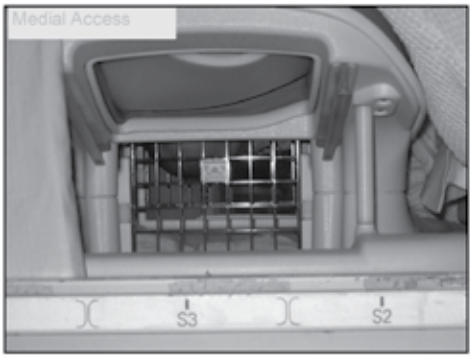

Insert vacuum biopsy device.
Hold on, keep level...
Specimens: 6-15


- Insert clip


Replace obturator before you withdraw sheath.

Notes

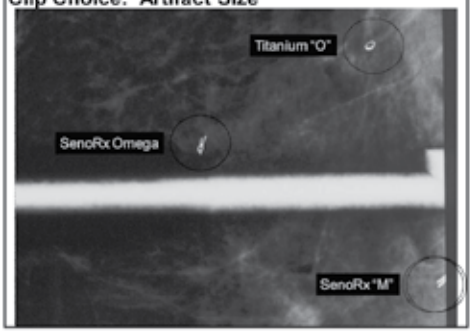




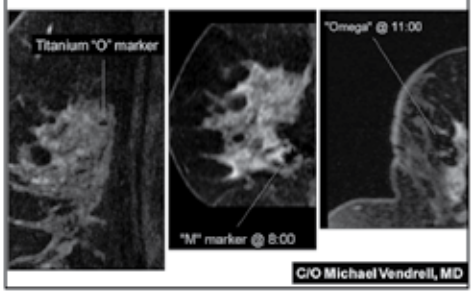
MR Biopsy: Comments

- VABB preferred: large sample.
- Published pos. MR biopsy rates: 24-54% (*24%*)
- Time: 90 → 60 minutes with experience.
- *Very* technologist dependent…
  - Positioning, pt contact, post-procedure care.
- Follow-up MR (benign result): (6 months).
- Always place a clip. Get mammo (migration).
- Clip artifacts variable… chose carefully.

Clip Choice: Artifact Size



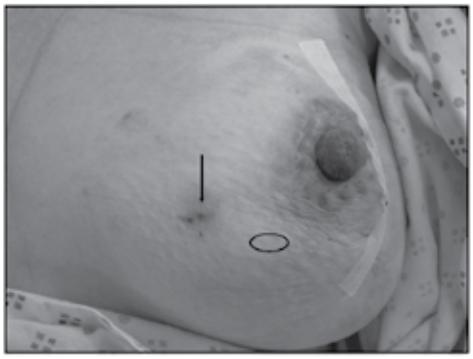
Clip Artifacts: Too little → Too much. or… "Lagom"



Complications/pitfalls:

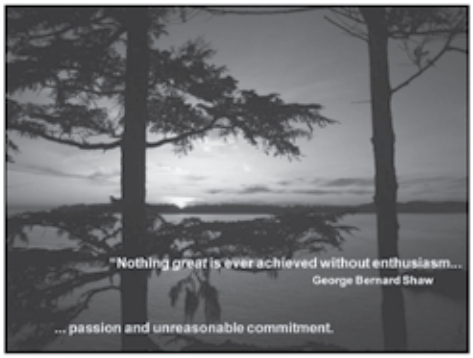
- Complications ≤ 5%: Bleeding, hematoma, pain, *and* non-diagnostic or discordant result.
- Wrong block configuration, location, orientation. Rt-Lt, too deep, recoil.
- Non-visualization: (warn patient!)
  - Too much compression…
  - Physiological/hormonal: "lesion" resolves…

Notes



After Biopsy Care:

- Immediate compression: 3-5 minutes.
- Clean breast.
- Ice, sandbag, rest.
- Clean again, Steristrip, Tegaderm.
- Written instructions, warnings on Ativan.
- Post-biopsy mammogram
- Rad-Path concordance report.
- Call her with the results.



Workshop: Update on guidelines and trials

Supported by an educational/research sponsorship by Roche Products Pty Ltd

Notes

Clinical Practice Guidelines

David Porter

In 2007 the New Zealand Guidelines Group convened a committee that would establish recommendations for evidence based management of all aspects of early breast cancer in this country. The goals were to review the evidence supporting practice in medical, radiation and surgical oncology, as well as psychosocial aspects of care and to make headway into improving the outcomes for Maori and Pacific Islanders which lag behind those of other ethnicities. The resultant publication was released in August 2009 and is available at http://www.nzgg.org.nz/guidelines/dsp_guideline_popup.cfm?guidelineCatID=7&guidelineID=157

Of the recommendations made by the guidelines group, ten were selected as being of the highest priority for implementation. These were the establishment of a national breast cancer database, implementation of compulsory pathology quality assurance and reporting standards, development of breast care nursing services as coordinators of care, a requirement for practitioners to participate in multidisciplinary meetings, support for psychosocial services, clinical follow up, and information provision, further enhancement of sentinel lymph node biopsy, and improving access to breast reconstruction.

Surgical guidelines and trials - Sentinel Node Biopsy

Ian Campbell

The NZGG Management of Early Breast Guidelines recommend sentinel node based management(SNBM) for women with unifocal invasive breast cancers < = to 3cm in size. Modelled on the National Breast and Ovarian Cancer Centre Guidelines, they also recommend informing the patient of the risk of a false negative result, appropriate surgeon training in the technique, use of radiotracer and blue dye where possible, and detailed pathology assessment of the sentinel node/s.

Surgeons in the USA and parts of Europe have been quick to embrace SNBM for all breast cancers with clinically negative axillae in part based on the myth that axillary surgery does not influence survival from breast cancer, and in part based on series showing much lower local recurrence rates in the axilla than would be expected from the known false negative rate of the technique.

In the 6 randomised trials of SNBM vs axillary dissection, the false negative rate ranged from 5.5% in our own SNAC trial to 16.7% in the GIVOM study where there was no formal surgeon accreditation. Only 2 of these trials (NSABP B32 and ALMANAC) allowed women with breast cancers over 3 cm in size and in these studies there were few women in this group. Results from these trials are awaited. The problems with using series as an evidence base for taking on all comers include: variable quality and completeness of follow up; relatively short follow up; and the selection of cases present in these series. Most series are of women with small endocrine responsive breast cancers that may run a very indolent clinical course. A recent Danish population based series is already showing significantly higher axillary recurrence rates with SNBM and a number of studies have shown much higher local recurrence rates (4-8 foldhigher) for women with HER2 positive or triple negative breast cancers. In the MIRROR study axillary recurrence rates for women with micrometastases on sentinel node and no further axillary treatment, were 8 fold higher for larger tumours, 5 fold higher for ER/PR negative tumours and 25 fold higher for Grade 3 cancers.

Women with these subtypes especially, need to be entered into the SNAC2 Trial to determine whether SNBM is the appropriate treatment strategy. I encourage you to participate.

Notes

ANZ Breast Cancer Trials Group

Jacquie Chirgwin

The ANZ Breast Cancer Trials Group (ANZ BCTG) was formed in 1978 to facilitate investigator initiated, multi-centre, clinical research in Breast Cancer in Australia and New Zealand. Since this time the Group has conducted over 50 trials, with more than 12,000 participants, resulting in 740 peer reviewed publications. The Group has been widely involved in international collaboration as well as developing and undertaking local clinical trials. The Group has more than 500 members representing 80 centres across Australia and New Zealand.

Although the founders of the Group Prof. John Forbes and Prof. Alan Coates remain strongly involved today, the transition to new leadership is underway, with Chair A/Prof. Fran Boyle and deputy Chair Dr. Nicholas Wilcken now leading the Scientific Advisory Committee (SAC). The ANZ BCTG mission "to eradicate all suffering from breast cancer through the highest quality clinical trials research" has guided the Group's strategic plan development begun in 2008. The Group is governed by a Board of Directors and this Board is supported in its duties by a number of committees, including the SAC which meets regularly to lead the Group's scientific agenda. The SAC has 31 members (excluding its sub-committees) from all disciplines (surgery, pathology, medical oncology, radiation oncology, laboratory and translational research, supportive care and psycho-oncology, epidemiology and statistics).

The Group, which is based in Newcastle, NSW, now has over 50 employees and is led by Chief Operating Officer (COO), Wendy Carmichael, and Director of Research Prof. John Forbes. The Group also has a fundraising arm, the Breast Cancer Institute of Australia which has provided much needed financial support for the research activities of the Group, contributing to the Group's position as the leading cancer clinical trials group in Australia.

There are currently 6 trials open for recruitment 2 pending and more than 12 in various stages of development. The open trials and those expected to open in the coming months will be presented at this meeting. An overview of the developing portfolio of new trials will also be presented.

Breast Cancer TROG Studies

Chellaraj Benjamin

TROG RAPID Study

This is a randomized trial of partial breast irradiation. Patients with DCIS or early invasive cancer treated with partial mastectomy are randomized between whole breast irradiation and partial breast irradiation.

TROG STARS Study

This is a randomised phase III multi-centre unblended comparison of 3 month anastrozole commenced prior to and continued during adjuvant irradiation for breast cancer compared to 3 months anastrozole commenced after irradiation with long term adjuvant hormone treatment.

TROG APBI Study

This is a multi-centre feasibility study of accelerated partial breast irradiation using three dimensional conformed radiation treatment for early breast cancer.

TROG 07.01 DCIS Study

This is a randomised phase III study of radiation doses and fractionation schedules in non low risk ductal carcinoma in situ of the breast.

Session 5: Meet the Experts – Opinions on Case Studies

Supported by an educational/research sponsorship by Roche Products Pty Ltd

Moderators: Belinda Scott and Robin Stuart-Harris

David Hyams, Sunil Lakhani, Bruce Porter and Chellaraj Benjamin

Notes

Notes

To infiltrate or not? Local anaesthetic in breast surgery

Kerr, E., Campbell, I.*, Cavanagh, S., Banerjee, S., Creighton, J., French, R., Ehrstrom, M. & Moodie, J.
Waikato Breast Cancer Trust and Breast Care Centre, Waikato Hospital, Hamilton, New Zealand.

Background and purpose:

Wound infiltration of local anaesthetic is commonly used during surgical procedures, however there is limited evidence to support its use in breast surgery. This study aimed to determine whether wound infiltration of local anaesthetic bupivacaine (0.25% with or without adrenaline) in breast surgery decreases postoperative pain and analgesic use, without increasing postoperative complications.

Methods:

A prospective randomized, single blind study was undertaken of 90 patients undergoing breast lump excision, wide local excision or mastectomy with or without axillary surgery. Patients were randomized into two groups. Group LA received 20mls bupivacaine (0. 25%) ± adrenaline, into the surgical wound at the end of surgery, with a further 20mls for axillary procedures. Group No LA served as a control receiving no infiltration. Pain scores were taken postoperatively at 4, 24, 48 hours and one week. All complications associated with wound healing were documented at the one week postoperative visit. Mann-Whitney, Chi square and Students t-test were used to analyse the data using SPSS (version 15.0) software.

Results:

90 patients were randomized; 45 to each group. There were no significant differences between patient groups or surgical details. Analgesic analysis revealed Group LA used significantly less Morphine (1.37 ± 0.49 mg vs. 2.54 ± 2.36 mg; p=0.008) and significantly less Oxynorm (8.46 ± 2.35 mg vs. 10.0 ± 4.01 mg; p=0.038) postoperatively. There were no significant differences in postoperative pain scores or complications associated with wound healing between the two groups.

Conclusion:

Pain scores in both groups were low, suggesting effective analgesic use by patients and nursing staff. Local anaesthetic during breast surgery has a marked opioid sparing effect. This has significant benefits for patients reducing nursing workload along with drug and wound infiltration costs.

Breast cancer prognosis using simple DNA markers

Oei P [1], Ramsaroop R [2], Low I [3], Harman J [4], Sweeton-Smith B [3], Park K [3], Wong KP [3], Chandler A [3], M Hastie [1], D Ng [1], Cotter P[1]

[1] IGENZ, Auckland, NZ, [2] DML, Auckland, NZ, [3] Middlemore Hospital, Auckland, NZ, [4] St Marks Womens Health, Auckland, NZ.

Introduction:

Cancer treatment has been revolutionized with new therapies using antibodies targeted to specific tumour molecules. They have reported an improvement of overall and disease free survival however they are significantly more expensive than standard chemotherapy. Therefore, it is now commonplace to have testing for the targets before therapy begins to potentially reduce overall costs and increase efficacy of the treatment.

In breast cancer, HER2 over expression / amplification is a common marker to test for prognosis and response to Herceptin - an antibody targeting the HER2 receptor. HER2 laboratory testing is simple, using either immuno-histochemistry (IHC) and / or fluorescence in situ hybridization (FISH) techniques. However, initial testing was problematic as different laboratories were not able to replicate result outcomes. Current practices are now well-documented and standardized through international guidelines. Recent publications have reported the use of these simple tests for prognosis or the identification of new targets for therapy.

Aim:

1. To assess the reproducibility of the HER2 result under different diagnostic conditions.
2. To assess other DNA markers including TOP2A, EGFR and MYC for a prognostic association.

Method:

A cohort of 85 patients with primary breast cancer was identified from two institutions. Of these, 45 were female diagnosed consecutive with breast cancer and identified as HER2 negative and ER/PR negative (triple negative) between 2003 to 2006. The remaining 40 were female diagnosed consecutively with breast cancer and identified as HER2 positive and ER/PR positive diagnosed between 2006 to 2008.

Immuno-histochemistry (IHC) and fluorescence in situ hybridization (FISH) techniques were undertaken as per manufactures instructions under a routine diagnostic laboratory environment. FISH probes used were HER2, TOP2A, EGFR, and MYC.

Results:

A comparison of the FISH and IHC results show a concordance of 95% in both HER2 negative and positive cases. These are within standard guidelines. A review of the IHC and FISH results re-classified two HER2 IHC positive cases. No reclassification of the HER2 IHC negative cases was undertaken.

In the HER2 negative group, MYC appeared to show a correlation with poor overall survival. Of the 6 cases that were amplified with MYC, 4 died within 14 months. The additional markers used showed no correlation with survival. Insufficient follow-up is available for the HER2 positive group, and in 12 months no deaths were reported.

Discussion / Conclusion:

The laboratory protocols for routine HER2 testing are robust and reproducible; and may be used for testing of other prognostic markers in breast cancer. This is a pilot study and long-term follow-up is required to further evaluate these markers. MYC amplification in triple negative breast cancer may be associated with poor prognosis. Studies to assess different prognostic markers using simple technology may provide useful tools for clinicians.

Notes

Notes

Breast cancer treatments for Waikato women with newly diagnosed breast cancer

Ooi C W L *, Campbell I D, Lawrenson R, Hamilton M, Kuper M, Round G, Lamont D.
Breast Care Centre, Waikato Hospital, Hamilton, New Zealand.

Background and purpose:

The Waikato Breast Cancer Register (WBCR) is a comprehensive regional population database of breast cancer diagnosed since 2005. Overall, the outcomes for women with newly diagnosed breast cancer in New Zealand are relatively good. Despite this, women in New Zealand still face a 20% greater chance of dying from breast cancer compared to women in Australia. This analysis seeks to examine those patterns in Waikato women.

Methods:

The database encompasses the breast cancer population from both screening and symptomatic presentations. Data is also collected relating to surgical procedures and adjuvant treatments including any chemotherapy, radiotherapy or endocrine therapies prescribed.

Results:

50% of patients with invasive tumours had breast conserving surgery (BCS) as a primary surgical procedure compared to 65% of patients with Ductal Carcinoma In-situ. Maori and Pacific Islander women tend to present with more advanced tumours leading to a higher proportion of mastectomies and nodal surgery. Consequently, they were also more likely to require adjuvant chemotherapy. 45% of Maori and 67% of Pacific Islander women required chemotherapy compared to 36% of European women. 50% of women who had a mastectomy received adjuvant radiotherapy compared to just over 90% of women who had BCS. Of women with endocrine responsive invasive cancers, 90% received endocrine therapy.

Conclusion:

Waikato women are receiving the appropriate treatment for their cancer stage. This is also applies to Maori women who despite having worse prognosis tumours are also receiving the appropriate treatment.

Reference:

1. Armstrong W, Borman B. Breast cancer in New Zealand: trends, patterns and data quality. *N Z Med J* 1996;109:221-224.

Presenting tumour features of Waikato women with newly diagnosed breast cancer from 2005-2008

Ooi C W L *, Campbell I D, Lawrenson R, Hamilton M, Kuper M, Round G, Lamont D.
Breast Care Centre, Waikato Hospital, Hamilton, New Zealand.

Background and purpose:

The Waikato Breast Cancer Register (WBCR) was established in 2005 to audit all Waikato women diagnosed with breast cancer. The primary goal is to establish the nature of breast cancer presenting in a defined regional population to examine inequalities in presentation and outcome. The population has the highest regional population of Maori women in New Zealand enabling detailed comparisons and analysis.

Methods:

All women residing in the Waikato region at the time of diagnosis are eligible for WBCR after informed consent. Detailed data of presenting complaint, diagnostic and surgical procedures undertaken, pathological findings, adjuvant treatments and follow up are prospectively collected.

Results:

From 2005-2008, 998/1008 (95%) eligible women consented for entry into the WBCR. The majority of patients (~80%) were of European origin with Maori women making up approximately 15%. Of the women diagnosed with breast cancer who were within the screening age, only 54% were screen-detected cancers. Maori and Pacific Islanders were less likely to present with a screen-detected cancer. Invasive cancers comprised 86% of the total. Maori and Pacific Islander women had larger tumours and a higher proportion of node positivity. They also had a higher proportion of Her 2 positive tumours.

Conclusion:

Significant variation in breast cancer presentation by ethnicity occurs in the Waikato. The extent of this variation is likely to lead to significantly worse cancer outcomes for these ethnic groups.

Reference:

1. Robson B, Purdie G, Cormack D. Unequal Impact: Maori and Non-Maori Cancer Statistics 1996-2001. Wellington: Ministry of Health; 2005.

Notes

Notes

Auckland Breast Cancer Study Group
Graphic representation of register data 2000 – 2008

Ramsaroop R*, Harvey V, Whineray Kelly E, Ng A, Thompson P, Murray P.
Auckland, New Zealand.

The Auckland Breast Cancer Study Group consists of a multi-disciplinary team of clinicians with a particular interest in breast cancer and research. The membership includes representatives from the subspecialties of surgery, pathology, radiology, radiation and medical oncology and allied health professionals including breast care nurses and breast physicians.

One of the key resources of the ABCSG is its database, the Auckland Breast Cancer Register. The purpose of the register is to provide accurate information on the diagnosis and pattern of care of breast cancer in the Auckland region.

The register was established in 2000 and now has 6519 patients on the database. The data collected is a powerful resource for patient management, quality control and research.

This poster is a graphic representation of the data from 2000 – 2008 encompassing 5698 patients.

A prospective audit of sentinel node biopsy by one surgeon over ten years - 2000 to 2009

Scott BMS *, Munro JM
Breast Associates Ltd, Auckland, New Zealand

Background and purpose:

The introduction of sentinel node biopsy has allowed less nodes to be removed with less morbidity and reports so far of equivalent overall and disease free survival compared to axillary dissection in trials.

It is important that individual surgeons undertake their own audit to look at the safety of this procedure in their hands.

This is a prospective audit of one surgeon's use of sentinel node biopsy from 2000 to 2009 . The outcomes looked at were overall mortality, local recurrence, breast and arm lymphoedema, false negative and false positive rates.

Method:

Data is collected on each patient who undertakes sentinel node biopsy at the time of surgery. This data was collated by the breast nurse, Jan Munro, and presented for statistical analysis.

Results:

286 Patients all with small, unifocal tumours, no axillary nodes palpable.

118 blue dye (41%)
82 scintigraphy (28.6%)
86 combination blue dye and scintigraphy (30.4%)
3 / 286 had no nodes identified by blue dye only

Deceased 6 (2%)
Arm lymphoedema 7
Breast lymphoedema 4
Local recurrence 8
Axillary recurrence 1 (0.34%)

55 out of 286 had positive nodes and proceeded to axillary dissection .(19%)
Intra operative one false positive (naevus cell)
Intraoperative false negative 12 (4.2%) of which 8 were micrometastasis
5/12 had axillary dissection (41%)

One true false negative in 10 years with axillary recurrence (0.35%)

Conclusion:

Sentinel node biopsy is shown to be safe with a very low overall recurrence of axillary nodes over 10 yrs (.0.34%). Micrometastasis continue to be a problem and may lead to second surgery (4.2%).

Notes

Notes

Scalp cooling by an indigenous device to prevent cancer chemotherapy induced alopecia

Singh G*, Kumar S, Kapoor R, Kumar M
Departments of Surgery and Radiotherapy, Postgraduate Institute of Medical Education & Research (P.G.I.M.E.R.), Chandigarh, India.

Background and purpose:

Chemotherapy often causes hair loss, a visible side effect of cancer treatment that is a source of emotional distress. Scalp cooling is the only effective method of reducing alopecia.

Methods:

Patients with biopsy/FNAC proven breast carcinoma who were receiving chemotherapy in the neo-adjuvant, adjuvant or metastatic setting were included in the study. Patients were randomly allocated to a study group (scalp cooling) and control group (no scalp cooling). Specially designed indigenous cooling caps were used. Scalp temperature was monitored with the objective of maintaining it at 10±50C. Scalp cooling was started 30 minutes before and lasted 60 minutes after chemotherapy. Alopecia was graded according to Common Terminology Criteria for Adverse Events v 3.0(CTCAE). Grade 0-1 was termed cosmetically acceptable alopecia.

Results:

Of the 90 patients, 48 were in the study group and 42 were in the control group. The mean age of the study group was 45.4 years (range 25–70 years). 50 patients were premenopausal. 47 patients (52.2%) received neo-adjuvant chemotherapy, and 42 (46.6%) adjuvant chemotherapy. 53 patients (58.9%) received FEC and 37(41.1%) received FAC. The mean scalp temperature achieved was 14°C (range 9.5°C to 18.5°C). Scalp cooling was well tolerated by most of the patients. Only few subjects complained of headache, cold sensation, and heaviness of the cap. After four cycles of chemotherapy, 30 patients (62.5%) in the study group had cosmetically acceptable alopecia (3 grade 0; 27 grade 1). In the control group all the 42 patients (100%) had grade 2 alopecia (cosmetically unacceptable). Patients in the study group had significant hair preservation as compared to the control group ($p = 0.001$). There was no difference in alopecia with the type of chemotherapy.

Conclusions:

This indigenous scalp cooling device was effective in ameliorating chemotherapy induced alopecia.

Long term arm and shoulder morbidity after treatment for breast cancer

Notes

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Background and purpose:

Shoulder and arm complications are among the most troublesome sequelae of breast cancer treatment that interfere with long-term quality of life.

Methods:

Female patients with breast cancer who had completed 1 year after treatment and were disease free were evaluated. Patient hospital records were accessed for stage, treatment, and histopathology details. Lymphedema was assessed using arm circumference and arm volume. Subjective symptoms of functional impairment and objective assessment of strength and range of movement at the shoulder was performed[1]. The disabilities of the arm, shoulder and hand (DASH)[2] questionnaire was used to assess the shoulder disability.

Results:

215 patients with a mean age of 48 years were analyzed. 63 underwent BCS and 152 mastectomy with axillary clearance. 115 received postoperative radiotherapy (BCS- 63, mastectomy-52). Mean tumor size was 2.6cm. Mean number of lymph nodes recovered from the axilla was 13.5 and the mean number of involved lymph nodes was 2.08. 33 patients (15.3 %) had significant lymphedema by volumetric measurement, 30(13.9%) by arm circumference difference and 20 (9.3%) by forearm circumference difference. 94 patients (43.7%) were found to be symptomatic. The mean symptom score was 2 (range 1-9). 20 patients (9.3%) were found to have objective morbidity. The mean score was 2.4 (range 1-5). 93 patients (43.2%) were found to have numbness and 42 (19.5%) found to have paraesthesia. BMI, number of involved axillary nodes, wound complications, and postoperative radiotherapy had a significant adverse outcome with lymphedema. Dash score was calculated in 123 patients. The mean score was 10.9 (range 1-52). Lymphedema, increasing dash score and wound complications adversely affected the objective and subjective assessments.

Conclusions:

Long term complications after treatment of breast cancer are common and tiresome though not life threatening.

References:

1. *Breast Cancer Res Treat* 2000;64:275
2. *BMC Musculoskelet Disord*. 2003; 4: 11

Notes

Analysis of risk factors for postoperative wound complications in 338 breast cancer patients

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Background and purpose:

The most common wound complications after breast cancer surgery are seroma formation, cellulitis, skin necrosis, and wound disruption.

Materials and methods:

342 patients with breast cancer underwent MRM or BCS and were prospectively evaluated. Patient demographics, operative details, histopathology, postoperative drain outputs, seroma aspirations and wound complications were recorded. Data for 4 patients was skewed and they were excluded from the analyses. Statistical analysis was done with PASW Statistics 18 for Mac(® SPSS Inc,USA).

Results:

90 patients underwent BCS and 248 MRM. The mean age of the patients was 49 years (range 31-75 years) and mean BMI of 24.2(range 18.5 - 33). One third of the patients had received preoperative chemotherapy. The mean tumor diameter was 3.1(range 1- 10 cm) cm and the mean node retrieval was 14 nodes with a mean positivity of 3 nodes. 52 patients had external compression dressing and 49 patients had the flaps sutured to the underlying muscles. 69 patients (20.4%) developed seroma. On multivariate analysis, longer duration of drainage, BMI≥30 and suturing of flaps were identified as significant predictors of seroma formation. 78 patients (23%) developed some wound complications with wound infection in 31 patients (9.2%), skin necrosis in 35 patients (10.4%) and severe wound gaping/necrosis or abscess in 9 patients (2.7%). Staphylococcus aureus was the most common bacteria on culture. On multivariate analysis, BMI≥30 (obese), tumor size≥5 cm and longer duration of drainage were found to increase the rate of wound complications after breast cancer surgery.

Conclusion:

Obesity and larger tumor size increase the risk of postoperative wound complications after breast cancer surgery. Longer the duration of drainage after surgery, higher is the rate of wound complications, probably because of the migration of bacteria from outside through the drains. Suturing of flaps reduces seroma formation significantly and should be used whenever possible.

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