



IMPORTANT DATES

26 Jun	Membership renewals due
7-10 July	2nd Australasian Breast Congress, Auckland NZ
28 Oct	ASBD Annual General Meeting, Leura Breast Cancer Conference
5-7 Oct 2017	11th Scientific Meeting, Sheraton Mirage, Gold Coast

Dedicated to promoting knowledge in the areas of prevention, diagnosis and management of breast disease

Edition No.10 | June 2016

ASBD Membership renewals NOW due - 26th June

Our membership year is drawing to a close. Renewals are due by 26th June to ensure delivery of the first version of *The Breast* in the 2016-17 membership year.

Renew your membership online at www.asbd.org.au or complete the Membership Renewal PDF and return to info@asbd.org.au.

[CLICK HERE TO RENEW](#)

New Level of ASBD Membership for Allied Health

ASBD now offers two levels of membership: Full and Associate. The Associate Membership is offered at a discounted rate for trainees, registrars, nurses & allied health professionals. The annual **Associate Membership** of ASBD includes a 12-month online subscription to *The Breast*, access to the members' website, discounts on ASBD conference registration, and access to ASBD newsletters and educational events.

The membership year runs from July 1 to June 30, in line with the Elsevier subscription to *The Breast*. Trainees, registrars, nurses & allied health professionals are now able to join via the members' website www.asbd.org.au.

The **Full Membership** of ASBD for physicians has the option of a hard copy version of *The Breast*, and full members have voting rights at ASBD meetings.

PRESIDENT'S MESSAGE



Once again, ASBD has had a very busy and exciting start to 2016 with a number of changes becoming effective later this year. Firstly, the Executive has now created

a new level of membership, the Associate Membership, which we would like to offer to trainees/registrar, nurses and allied health professionals working in the field of breast cancer. On behalf of the Executive, I would like to welcome allied health professionals to the ASBD and hope that you will find that being a member of our Society will bring you such benefits as networking with other professionals working in breast cancer, access to multidisciplinary meetings, the "Breast" journal and the ASBD website.

Secondly our new website is close to being completed and will be launched later this year. We anticipate that it will allow easier membership renewals, access to multidisciplinary forums and updates.

Thirdly I would like to invite you to attend our upcoming multidisciplinary meeting, the second Australasian Breast Congress (ABC2) in Auckland on July 7-10, 2016. This is our second collaboration with the BreastSurgANZ society and has a very exciting programme which is a combination of a 2-day Oncoplastic Surgical workshop followed by a 2-day multidisciplinary meeting. In addition, this year we have added a Radiation Symposium which is an educational meeting addressing topical issues within Radiology and Radiation Oncology. ABC2's Scientific Convenor, Miss Katherine Gale, has worked tirelessly in procuring a record number of overseas experts within the fields of surgery, radiology, radiation oncology and medical oncology.

I look forward to seeing you in Auckland in July.

Dr Yvonne Zissiadis
President ASBD

TELL US WHAT YOU THINK

We want to hear from you!

ASBD wants to remain relevant to its members' needs. If you have any comments on meetings, membership or other issues please take a few moments to email Kerry at: kerrye@asbd.org.au



EXECUTIVE OFFICER'S REPORT



The Australasian Society for Breast Disease is entering an exciting phase as we launch our **Associate Membership**. We hope that this will place us in

a great position to draw on the wealth of expertise within our group to provide some exceptional training opportunities for specific allied health groups in the future, as well as offering access to ASBD conferences and events at a discounted rate.

The **ASBD website** will undergo a rebuild in September/October this year. We anticipate that the new website will provide an enhanced user experience for members and provide better links with the membership payment portal and the Elsevier Breast Subscription.

The Australasian Society for Breast Disease will hold its **11th Scientific Meeting** at the Sheraton Mirage Resort on the Gold Coast from 5-7 October 2017. Save the date!



ASBD held a successful **Applied Ultrasound for Clinicians** course at the Marriot, Melbourne in February that attracted RACS and ASUM CPD points. This was attended by 24 delegates who had the opportunity to participate in the practical workshop involving live scanning of patients, and biopsy techniques on phantoms.

Thank you to the speakers who gave of their time to present these workshops, including Dr Daniel Lee, A/Prof Ian Bennett, Dr Michael Law, Dr Daniel de Viana and Mr Brian Starkoff. Thank you to Bard, Hologic, GE and LifeHealthcare who came together to provide the necessary equipment and resources for the day.

The **ASBD Annual General Meeting** will be held at the Leura Breast Cancer Conference in October. Further details will be sent to members prior to the event. Please note this date in your diary.

The next month will be the busiest period of the year for me with membership renewals and the 2nd Australasian Breast Congress in New Zealand. We look forward to an exciting congress in Auckland and already have in excess of 250 registrations.

Don't forget to renew your membership!

**Regards,
Kerry**

ASBD Membership Rates

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Renewals are due by 26th June to ensure delivery of the first version of The Breast in the 2016-17 membership year.

Renew your membership online at www.asbd.org.au or complete the Membership Renewal PDF and return to info@asbd.org.au.

Full Membership – Physicians & surgeons

The annual membership of ASBD includes a 12-month subscription to The Breast.

This can be an online and hardcopy or online only subscription.

Option A

Membership	
July 2016-June 2017	\$100.00
GST	\$10.00
The Breast (hardcopy & online)	\$185.00

Total incl GST (AUD) \$295.00

Option B

Membership	
July 2016-June 2017	\$100.00
GST	\$10.00
The Breast (online only)	\$90.00

Total incl GST (AUD) \$200.00

Associate Membership – Trainees, registrars, nurses & allied health

The annual Associate membership of ASBD includes a 12-month online subscription to The Breast.

Membership	
July 2016-June 2017	\$50.00
GST	\$5.00
The Breast (online only)	\$55.00

Total incl GST (AUD) \$110.00

ABC₂ 2nd Australasian Breast Congress



7th-10th July 2016
Auckland, New Zealand
North Shore Hospital
& The Langham



The **2nd Australasian Breast Congress**, a joint ASBD and BreastSurgANZ event, will be held in Auckland from July 7-10, at North Shore Hospital and The Langham. This is shaping up to be an exciting event and a first of its kind for New Zealand, with already over 250 registrations received. Live surgery and live commentary by some of the world's top breast surgeons including Mr Douglas Macmillan, Mr Stephen McCulley and Mr Krishna Clough will be transmitted to the conference auditorium at North Shore Hospital (Part A).

An optional full day Radiation Symposium will be held at The Langham with speakers including Prof Frederik Wenz, radiation

oncologist from Germany and Prof Andy Evans, a breast radiologist from Dundee, UK.

The multidisciplinary component (Part B) at The Langham on Saturday and Sunday will include all of the above mentioned speakers and Prof Pamela Munster, medical oncologist from USA, along with local faculty.

There are still places available in the Radiation Symposium and Part B Multidisciplinary, registrations have closed for Part A, the Live Oncoplastic Surgical Workshop.

For more information or to register go to www.breastcongress.org

UPDATE FROM THE SOCIETY OF BREAST IMAGING (SBI) SYMPOSIUM

April 7-10, 2016, Austin Texas -Dr Donna Taylor



The annual SBI symposium is held in the USA and is the largest meeting of breast imagers in the world. It is attended by almost 1,000 Radiologists and Medical Imaging Technologists.

The Keynote lectures in the mornings focused on:

- Screening and the state of breast imaging
- Biology and treatment
- Patients, protocols and pathology
- Challenges in breast imaging practice

A variety of practically orientated refresher courses were held in the afternoons and included topics such as "how to optimize your ultrasound images", "BI-RADS Lexicon and Atlas Update" and "implementing tomosynthesis into your practice." Separate streams in the program targeted medical imaging technologists (e.g. "basic and advanced positioning", "tips for technologists on interventions") and members in training (eg "career track: comparing academic and private practice").

The most inspiring parts of the meeting for me were the Keynote lectures, each featuring a high profile expert presenting the latest research on controversial topics in breast cancer.

Breast cancer screening

The session on breast cancer screening discussed issues relating to the recent US Preventive Services Task Force report that advocates biannual screening mammography as standard of care for women aged 50-69, despite evidence that 1/3 of the years of life lost to breast cancer are in women aged 40-50 years. This report and other recent articles in the press questioning the effectiveness and possible "harms" of screening has caused considerable disquiet amongst the breast cancer medical fraternity. It is vital that we combat this to maintain and improve women's participation in screening programs. The SBI has worked hard to develop strong links with the American media, and it uses social media extensively to keep promoting the mantra: "screening mammography in women over the age of 40 saves lives". The SBI is also part of Mammography Saves Lives,™ a not for profit coalition of three medical associations representing a broad spectrum of breast cancer care experts founded to reduce confusion regarding when and how often women should receive mammograms. Their website www.sbi-online.org/endtheconfusion/ProviderResources.aspx offers women accurate information about this.

MRI screening

Dr Christiane Kuhl discussed improving access to MRI for screening with the use of an abbreviated scanning protocol (JCO August 1, 2014 vol. 32 no. 22 2304-2310) that takes only a few minutes to perform and seconds to read. Use of this new protocol was shown to have equivalent diagnostic accuracy to the standard

technique, however more studies are needed (the results of the ACIN-ECOG (Eastern Cooperative Oncology Group) multicenter trial designed to prospectively evaluate abbreviated MRI are eagerly awaited) to ensure that these excellent results can be replicated by others prior to widespread adoption.

Options for women with mammographically dense breast tissue

There is increasing awareness that the presence of dense breast tissue on mammography is a strong independent risk factor for breast cancer and that the sensitivity of mammography in this group is considerably reduced. Action by women's advocacy groups in the USA (www.areasdense.org) has led to 24 states enacting legislation that requires patients with mammographically dense tissue be notified of this so that they are aware of the limitations of mammography and can discuss whether or not to have supplementary screening with their family physician.

For women, receiving a letter notifying them that they have dense breasts can cause anxiety and confusion. Some women think they should have alternative methods of screening instead of a mammogram and others think the letter means they are at high risk of developing breast cancer.

There are several issues that must be faced as a result of this, including:

- (1) How do we best quantify breast density? Should we use software such as Volpara or Quantra?
- (2) Should all women with dense breasts have supplementary screening or only those with additional risk factors?
- (3) Which supplementary screening technique is best: tomosynthesis, ultrasound, molecular breast imaging, contrast enhanced mammography or MRI?
- (4) How will these supplementary tests be funded?

We need to move to a more personalised approach to breast cancer screening as it is those women with additional risk factors other than dense tissue who will benefit most from supplementary screening. The current risk assessment tools (Tyrer-Cusick, BRCAPRO, Gail, Claus) use different combinations of factors to calculate risk and very few incorporate breast density and their use can result in quite different risk levels for the same woman. More research needs to be done to determine the optimal model to use and the best supplementary screening technique for that collection of risk factors.

Several presentations focused on the results from trials using adjunctive screening technologies such as ultrasound, MRI and molecular breast imaging (MBI). Dr Wendie Berg presented the interim results

of the ASTOUND (Adjunct Screening With Tomosynthesis or Ultrasound in Women With Mammography-Negative Dense Breasts) Trial (<http://jco.ascopubs.org/content/early/2016/03/07/JCO.2015.65.8674>), which suggest that the addition of tomosynthesis to standard mammography gives only a relatively modest supplemental cancer yield (4 per 1000 screens). Ultrasound had a significantly higher additional cancer detection rate (7.1 per 1000 screens) with a similar (3%) recall rate. For women with dense breasts given the choice of US or tomosynthesis, US shows more cancers.

MRI although the most sensitive test of all, with additional cancer detection rate of 11 per 1,000 for women at average risk with mammographically dense breasts has a high recall rate (9-22.7%), is expensive, has limited accessibility, requires IV contrast and is not tolerated by a significant number of women (Berg W et al JAMA 2012; 307:1394-1404).

MBI uses an injection of 99m Tc sestamibi, an agent that shows uptake in metabolically active tumours due to increased mitochondrial activity and neovascularity. MBI has long acquisition times (10 minutes per view) and is associated with a higher effective radiation dose than mammography (2.5mSv cf 0.5mSv). For MBI the radiation exposure is also applied to the whole body, not just the breast. A recent study by Rhodes et al (AJR 2015; 2014: 241-251) found that MBI had a supplemental cancer detection rate of 8.8 per 1000 screens with an additional 6.6% increase in recall rate when added to standard mammography.

Contrast enhanced mammography is another functional imaging technique that like MRI is able to show areas of neoangiogenesis in the breast. Published studies to date suggest that it may have slightly inferior sensitivity but better specificity for cancer detection when compared with MRI (Jochelson et al Radiology 2013; 266:3: 743-751). To date no data has been published on its use as a screening tool although the interim results of a trial performed at the Memorial Sloan Kettering Cancer Centre comparing cancer detection rates for screening MRI and CESM in 307 women with >15% lifetime risk of cancer suggest that the performance of CESM does not differ significantly from that of MRI (Insights Imaging 2016; 7 (suppl 1): B-1063).

Conclusion

I highly recommend attending the SBI Meeting as a gathering of like-minded people, all keen to provide patients with the best possible methods of diagnosis and treatment. The presentations are excellent and the networking opportunities fantastic!

NEWS FROM THE 2016 RACS ASC - Dr Daniel De Viana

Around 1800 delegates attended the 2016 Royal Australasian College of Surgeons Annual Scientific Congress at the Brisbane Exhibition and Convention Centre from May 2-6. The Breast Surgery program included keynote speakers Michael Douek, Professor of Surgical Oncology, Kings College, London and Consultant Surgeon at Guy's and St Thomas' NHS Foundation Trust, and Alastair Thompson Professor, Department of Surgical Oncology, The University of Texas MD Anderson Cancer Centre.

Sessions covered topics including genetics, management of the high risk patient, managing the axilla, oncoplastic surgery, and presentations on issues related to neoadjuvant and radiotherapy.

Professor Michael Douek has a research interest in developing and evaluating novel techniques in cancer surgery. He has been involved in the development of a novel magnetic technique for sentinel node biopsy. He spoke about the logistics of the technique involving injecting iron oxide either peritumourally or subcutaneously and detecting axillary nodes with a magnetometer. Several studies have shown it is non-inferior to the standard sentinel node technique. These studies have used all dyes together in each patient, and as yet there are no randomised studies comparing the technique alone versus the standard technique. Although tertiary centres in the western world may not obtain extra benefit from this technique, globally access to isotopes is poor and this could be a valuable technique in those areas. For example throughout China only 5% of patients have sentinel node biopsy due to isotope restrictions in that country. Disadvantages of the technique include the inability to use metal instruments in the axilla during the technique, a problem that was largely manageable, and the persistence of artefact on MRI at the injection site.

There was a topical session on contemporary management of the axilla. Professor Michael Douek gave a largely UK perspective on managing sentinel node positivity in the adjuvant setting,

post-Z011. He made several points about positive axillary sentinel nodes (excluding ITC's)

1. Preoperative ultrasound of the axilla should be routine, however this was not the case in trials such as Z011. Only obviously abnormal nodes should be biopsied to avoid overtreatment.
2. If they meet Z011 criteria then no further therapy to the axilla.
3. If Z011 criteria are not met (e.g. mastectomy patients) or if clinician is a Z011 non-believer then consider entry into POSNOC trial (www.posnoc.co.uk/healthcare-professionals/protocol), or axillary clearance.
4. If POSNOC criteria not met then axillary clearance.
5. Data suggests that if extranodal extension (ENE) is present and less than 2mm these patients have equivalent outcomes to patients with positive nodes not having ENE (Choi, JAMA Surg. 2015) and managed along Z011 type paradigms.

A consensus statement on this from the UK Association of Breast Surgeons can be found [here](#).

Teresa Nano from Brisbane spoke on managing patients in the neoadjuvant setting (NAC) and based on a review of various studies including NSABP-B27, ACOSOG 1071, SENTINA, SN FNAC, she made the following points:

1. SLN biopsy after rather than before neoadjuvant therapy in clinically node-negative patients is reliable.
2. In clinically node-positive patients responding to treatment, an acceptable false negative rate can be achieved with SLN biopsy after NAC if 3 nodes are taken. Lower node yields resulted in a false negative rate greater than 10%.
3. This can be further improved if dual tracers are used, and involved nodes identified at presentation are clipped pre-chemotherapy and removed at SLN biopsy.

4. In clinically node-positive patients appearing to have a cCR in the axilla with NAC and then having SLN biopsy post NAC, inclusion of immunohistochemically (IHC) positive nodes as node positive reduced the false negative rate down to 4.9% (Rubio IT, WJCO 2016).

Professor Alastair Thompson gave a keynote lecture on "non-invasive lobular neoplasia: what we know and what we should do." He provided insights based on the Sloane Project database, a prospective cohort of over 13000 patients in the UK with non-invasive breast neoplasia from 2002- 2012. He identified large variations in management across various UK centres. For example mastectomy rates for DCIS less than 20 mm in size accounted for 20% of all mastectomies for DCIS. Some centres had up to 60% mastectomy rates for all DCIS. He identified the poor correlation between pathology and radiology as a confounding factor in this regard. A large variation was also seen in patients having radiotherapy after breast conserving surgery. Centres varied from a 10% rate of radiotherapy to a 90% rate.

He worked through the potential options of managing low grade DCIS and the pitfalls. Surgery seems like an obvious approach but around two thirds of patients in the Sloane database had chronic pain post surgery in some form. He suggested lifestyle measures and chemoprevention have compliance issues (only 68% of patients in IBIS II stayed on anastrozole for 5 years). Active surveillance has been put forward as a viable option and currently a number of trials are either about to start, or are actively recruiting patients (LORIS- UK, LORD- EORTC, COMET -US, LARRIKIN- ANZ). The primary endpoint for these studies is ipsilateral invasive disease. He encouraged all to try and get involved in these studies.

Next year's RACS ASC will be held in Adelaide, 8-10 May, 2017.

ASBD EXECUTIVE 2015-16

NAME	DISCIPLINE				
Dr Yvonne Zissiadis	Radiation Oncologist	Dr Daniel de Viana	Breast Surgeon	Dr Michelle Reintals	Radiologist
President		Dr James French	Breast Surgeon	A/Prof Nirmala Pathmanathan	Pathologist
A/Prof Meagan Brennan	Breast Physician	Mr Richard Harman	Breast Surgeon	Dr Reena Ramsaroop	Pathologist
Secretary/Treasurer		Dr Catherine Shannon	Medical Oncologist	A/Prof Donna Taylor (co-opted)	Radiologist
		Dr Kerry McMahon	Radiologist	Dr Debbie Pfeiffer (co-opted)	Breast Physician

ABC2 International Faculty

The 2nd Australasian Breast Congress will bring a number of world class international speakers to New Zealand including:



Mr R Douglas Macmillan
Oncoplastic Breast Surgeon, Nottingham, UK

Douglas Macmillan qualified at the University of Glasgow in 1988 and trained in Glasgow, Edinburgh and Nottingham. He was appointed as Consultant Oncoplastic Breast Surgeon at the Nottingham Breast Institute in 2001 where he is also the clinical lead for breast surgery and breast cancer. He leads a research group in Oncoplastic Breast Surgery, collaborates with the Nottingham University Breast Cancer Research Unit and has published extensively (over 130 original articles and over 20 book chapters). He has given over 150 invited presentations at international meetings and performed many live surgery demonstrations. In oncoplastic surgery he has a particular interest in the techniques of therapeutic mammoplasty, chest wall perforator flaps and implant reconstruction. He is co-director of the International Oncoplastic and Reconstructive Breast Surgery Congress (ORBS, www.orbsmeetings.com) and manages the associated on-line resource for oncoplastic and reconstructive breast surgery (www.orbsweb.com).



Prof Andy Evans
Breast Radiologist, Dundee, UK

Andy Evans is a graduate of Birmingham Medical School and after gaining his MRCP trained in Diagnostic Radiology in Nottingham gaining the FRCR. He became a consultant radiologist with a special interest in breast imaging in 1992. He was appointed director of the Nottingham International Breast Education Centre in 2006.

In 2009 Andy moved to Dundee to become professor of breast imaging. He is the author of over 130 peer-reviewed papers, 4 books and 14 book chapters. He was the chairman of the British Society of Breast Radiology. Andy plays the French horn and is a successful composer of classical music.



Mr Krishna Clough
Consultant Plastic Surgeon, Paris, France

Dr Krishna B. Clough is a surgical oncologist and a plastic surgeon. He specialises in the treatment of breast cancers and all aspects of breast surgery, both oncologic and plastics. He graduated in general surgery, and in oncology, as well as plastic surgery. After completing his surgical training in France (Paris) and in the United States (Columbia University, New York and Emory University, Atlanta), Dr Clough joined the team at the Curie Institute in 1990, where he was appointed Chief of the Department of Breast Surgery while developing the concept of oncoplastic surgery. He then decided to quit Curie in 2004 to create France's first breast center—The Paris Breast Center. The Paris Breast Center became the leading private institution in breast cancer surgery and plastic surgery in France. Dr Clough has published more than 140 peer-reviewed papers and 13 book chapters.



Mr Stephen J McCulley
Consultant Plastic Surgeon, Nottingham, UK

Stephen McCulley is a specialist in the treatment of breast cancer and breast reconstruction, having achieved expert national and international recognition in this field through extensive lecture presentations, courses and publications. He is one of the few Consultants in the UK that can offer both cancer surgery and the full spectrum of breast reconstruction options. He also works extensively as a Cosmetic Plastic and Reconstructive Surgeon offering private patients the latest techniques in cosmetic surgery.



Prof Frederik Wenz
Radiation Oncologist, Mannheim, Germany

Prof. Wenz received his MD degree from the University of Heidelberg in 1992 after studies in medicine and physics in Heidelberg, Birmingham, San Antonio and Chicago.

In 2000 he became professor and chairman in the department of radiation oncology at the University Medical Center Mannheim, University of Heidelberg. Prof. Wenz has published more than 300 peer-reviewed journal papers and edited 4 text books. He served as an editorial board member for several journals. His clinical specialties are breast and prostate cancer, while his research interests are focussed on novel technologies like intensity modulated radiotherapy (IMRT), image guided radiotherapy (IGRT), stereotactic ablative radiotherapy (SABR), intraoperative radiotherapy (IORT) and radioprotective gene-therapeutic approaches.



Prof Pamela Munster
Medical Oncologist, San Francisco, USA

Dr. Munster received her medical degree from the University of Bern, Switzerland; completed her residency in Internal Medicine at Indiana University Medical Center then moved to Memorial Sloan Kettering Cancer Center, New York for her oncology and hematology fellowship. She served at Memorial Sloan Kettering as a faculty member in the breast cancer program before joining the Division of Breast Oncology and Experimental Therapeutics Program at Moffitt Cancer Center and Research Institute, in Tampa, Florida. Dr. Munster led the group as the Scientific Director of Breast Research and Co-Chair of the Phase I Program at Moffitt for six years prior to joining the University of California in San Francisco. Currently Dr. Munster is Professor in Residence at the University of California, San Francisco, where she is also the Director of Early Phase Clinical Trials Program at the Helen Diller Family Comprehensive Cancer Center and Program Leader of Developmental Therapeutics. Dr. Munster is Co-Director of the newly-formed Center for BRCA Research, a BRCA-focused clinical and research program at the Helen Diller Family Comprehensive Cancer Center at UCSF.

The organising committee would like to thank Acelity, Carl Zeiss and the NZBCF for sponsoring our speakers.

CASE STUDY

First presentation

In 2015, the patient presented to a diagnostic breast clinic in another regional city where her mother lives. She was asymptomatic but requested screening advice in view of a strong family history of breast cancer. There was a history of breast cancer in her mother, maternal grandmother, two maternal aunts and a maternal female cousin who was the youngest affected relative at 42. There was a strong paternal family history of prostate cancer in her father and two paternal uncles.

A Tyrer-Cusick Risk Assessment was performed, yielding a lifetime risk of breast cancer of 54.1%.

Clinical examination at presentation revealed symmetric thickening in the upper and lower quadrants of both breasts but no focally suspicious features.

Two-view mammography with tomosynthesis showed scattered fibroglandular densities with a few scattered calcifications in the right breast and a few small non-specific densities with benign features in each breast.

Bilateral whole breast ultrasound showed normal breast tissue and a 3 mm hypoechoic lesion suggestive of a cyst at 11/7 in the left breast. In view of the family history, FNA of the 3 mm lesion was performed, yielding benign cyst contents.

The multidisciplinary breast clinic team felt there were no clinical or imaging signs of breast cancer with conventional imaging, but in view of the patient's high-risk status, discussed the options of breast MRI and referral for genetic counselling.

The patient opted to defer breast MRI but requested a referral for genetic counselling which was provided following consultation with her General Practitioner in her home city. She was returned to her GP for follow-up and was recommended to return to the diagnostic clinic for annual high-risk screening in one year.

Second presentation

The patient returned to the diagnostic breast clinic one year later at age 36. She had intentionally lost 12 kg over the past year and thought that her breasts were noticeably more lumpy, with some intermittent tenderness in the right breast. She was using the progesterone-only mini-pill, Microlut, for contraception. Most importantly, she had been found to have a BRCA2 gene mutation a few months previously. She wished to discuss further screening and risk reduction strategies in light of this new information. The Tyrer-Cusick Risk Assessment was recalculated as 79.8%.

The patient further disclosed that she had only had one child so far, and that her pregnancy had been complicated by Factor V Leiden thrombophilia requiring daily heparin injections and hospitalisation in late pregnancy or

The patient is a 36-year old married, employed woman with one child. She lives in a regional city.

placental insufficiency. She had been advised that she would require twice daily heparin should she embark on another pregnancy.

Clinical breast examination on this occasion revealed more focal thickening in the upper outer quadrant of the right breast and upper inner quadrant of the left breast. Two-view breast tomosynthesis showed extremely dense breast tissue with stable microcalcification. Ultrasound showed multiple cysts up to 13mm diameter in the right breast and up to 12 mm in the left breast. In addition, there were three oval hypoechoic lesions measuring 6-9 mm in diameter with equivocal features at 1 and 8 o'clock in the right breast, and a 5 mm oval lesion with equivocal features at 3/2 in the left breast. In view of her BRCA2 status, FNA of all four lesions was recommended and performed. The three lesions in the right breast all yielded benign aspirates, but the 5 mm lesion in the left breast was reported as "indeterminate breast tissue falling short of criteria for cytological atypia".

If you were the managing clinician (a breast physician, in this situation), how would you proceed from here? The patient had to return to her regional home town the day following her visit to the clinic, prior to the final results of the FNA biopsies being available.

Discussion

There are multiple issues for consideration in this real-life situation. In possible order of priority, these include:

1. The patient has multiple benign lesions in both breasts, predominantly cysts, and one small, non-cystic lesion in the left breast with an indeterminate FNA result.
2. The patient lives in a regional city with limited access to breast specialist imaging and treatment, but is willing to travel to the capital city for whatever is required.
3. The patient has only had one child, and risk factors for further pregnancy complications, and is not sure whether she should risk another pregnancy and possibly conceiving a BRCA2-affected child.
4. The genetic counselling report recommended bilateral salpingo-oophorectomy before the age of 40 and prophylactic bilateral mastectomy.

Actions

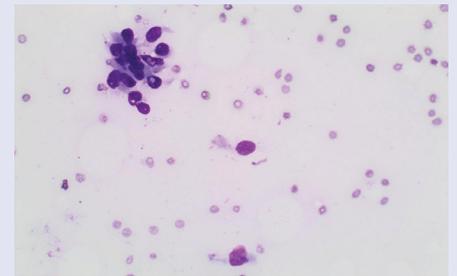
The patient was offered ample time with the breast physician at the diagnostic clinic to discuss her current findings, risks, and options for the future. Her biopsy results were relayed to her by telephone the following day, and her GP was consulted regarding recommendations for proceeding.

In the first instance, the patient was referred for consultation with a specialist breast surgeon in the capital city, with a breast MRI

arranged prior to the consultation. The results of the breast MRI would likely be benign, but may assist in determining whether the small equivocal lesion in the left breast should be re-biopsied, excised or watched.

The patient would hopefully have the opportunity to discuss with the breast surgeon the risks versus benefits of risk-reducing surgery and ramifications for future fertility.

The patient was also informed of the online BRCA- support networks, Pink Hope (www.pinkhope.org.au) and Hereditary Breast and ovarian Cancer Information and Advocacy (www.facingourrisk.org).



Cytology of FNA aspirate from lesion at 3/1 left breast showing retention of cytoplasm in some single cells and mild cellular atypia

