ASBP
The Australasian Society of Breast Physicians

Standards for Training and Competence of Breast Physicians

The Australasian Society of Breast Physicians (ASBP) 2015

breastphysicians.org

Foreword

After half a decade, we are pleased to present the revised version of the ASBP training document.

Thanks are due to the members of the training sub-committee (Drs Debbie Pfeiffer, Meagan Brennan, Lisa Erzetich and Fran Jones), and to the Executive of the ASBP for their dedication to the task of re-drafting the document.

The role of a breast physician remains as eloquently outlined by the late Dr Cathy Galbraith. Her original introduction to our 2007 document has been retained as a dedication to her vision.

Dr Sue Fraser
President
The Australasian Society of Breast Physicians
2 December 2012

Acknowledgements

We acknowledge, and are indebted to, Dr Catherine Galbraith (ASBP President 2004-6) as the major driving force in the preparation of the inaugural 2007 edition of the *ASBP Standards of Training and Competency of Breast Physicians.*

This document was expanded in 2012 by Fellows of the ASBP associated with the Sydney Breast Clinic, the Wesley Breast Clinic, Breastscreen New South Wales, Breastscreen Queensland and the Westmead Breast Cancer Institute and revised in 2015.

Contents

1. Introduction

The Australasian Society of Breast Physicians

The Australasian Society of Breast Physicians (ASBP) supports the professional role of breast physicians by representing their interests at state and national levels.

It assesses the competence of members' practice through a supervisor-based training program, and through formal written and oral examinations.

For further information regarding the forms of membership of the ASBP and the ASBP examination, please refer to our website, www.breastphysicians.org

History of Breast Medicine

'Breast physician', a term used since 1990 in Australia and New Zealand, describes a medical practitioner who, following a period of training, works clinically in the field of breast medicine, adopting a holistic approach to investigation and management.

Breast physicians have worked in their specific role since 1980 in dedicated diagnostic breast clinics and in the national mammographic screening program, BreastScreen Australia, since its inception in 1990. Breast physicians contributed to the pilot screening projects completed two years before the 1990 launch of BreastScreen Australia.

The role of a breast physician

In a dedicated breast unit, the role of breast physicians encompasses examining patients, interpreting imaging, undertaking and interpreting sonography, performing interventional procedures, managing benign conditions, maintaining surveillance, counselling, and managing patients at increased risk of breast cancer.

Breast physicians work in multidisciplinary teams, which usually include radiologists, surgeons, pathologists, medical and radiation oncologists, imaging technicians and breast care nurses. This integrated and evidence- based approach achieves the best outcomes for patients.

Breast physicians require extensive knowledge of all the related specialties involved in the investigation and management of patients with breast problems – in order to investigate, manage and/or coordinate the appropriate care and follow up of patients.

In *BreastScreen* services, the breast physician's role varies according to local requirements, but usually includes clinical assessment, counselling, the reading of screening mammograms and the diagnostic evaluation of mammographic abnormalities.

Standards of competence

The standards described below indicate the minimal expected levels of knowledge, skill and clinical decision making required of a competent breast physician, whether working in a public or private setting. These standards will:

a. assist health regulatory and professional bodies in benchmarking safe practice for doctors identifying themselves as breast physicians
b. provide a framework for future training programs, and for the assessment of breast physicians
c. provide guidance to health regulatory bodies for health workforce planning and
d. assist patients in choosing a qualified breast physician.

Competence and qualities of a breast physician

The ASBP has identified the following areas in which breast physicians should demonstrate competence in clinical skills and knowledge relevant to breast medicine, including:

a. knowledge of symptomatology and clinical signs
b. understanding and interpreting breast imaging modalities
c. performing interventional procedures
d. understanding cytopathological and histopathological principles, techniques and features
e. understanding of reproductive endocrinology and associated exogenous hormonal manipulations
f. understanding genetic issues and risk management strategies
g. possessing counselling and communication skills
h. understanding epidemiological principles and population health strategies.

The ASBP has also identified the following professional qualities which breast physicians should possess:

a. professional and ethical responsibility
b. a commitment to inter-professional communication, collaboration and multidisciplinary care
c. a commitment to continuing professional development
d. a commitment to health advocacy and
e. an appreciation of the organisational and

accreditation requirements across the spectrum of practice of breast medicine.

Continuing professional development

The Society mandates continuing professional development (CPD) in order that Fellows and Registrars maintain, improve and increase their knowledge, skills and competence, as well as develop the personal, professional and ethical qualities required for continuing practice.

The Society has had a CPD program for Fellows since 2003. In order to align with other specialist colleges, the program was updated in 2010. As a result, the new triennium commenced on 1 January 2014.

Doctors practising as breast physicians must undertake the program of CPD recommended by the ASBP. Breast physicians also participating in other specialty CPD programs should be able to claim ASBP CPD activities in the appropriate sections of other colleges. Details of the CPD program are contained in a separate publication, *The ASBP 2014-2016 CPD Program*, available on the ASBP website, www.breastphysicians.org.

The CPD program is updated each triennium.

Training program

Breast physicians will vary in their levels of clinical involvement in breast medicine. It is the responsibility of each breast unit employing breast physicians to ensure that Registrars are given opportunities and resources to develop the skills necessary for their respective roles.

The training program outlined in this section is a recommended model on which individual breast units can base their own teaching *(see Appendix 1: Suggested Training Program)*. However, the previously outlined standards of competence are areas of knowledge and skill which every breast physician must develop in order to achieve Fellowship status.

Training to become a breast physician

The requisite period of training to achieve the Fellowship of the Society is minimum 5 years full-time* experience in a dedicated breast diagnostic and/or BreastScreen Australia/Aotearoa service.

* (Full-time is estimated at 32 hours per week, over a 47 week year, giving a minimum requirement of 4500 hours experience as the part-time equivalent.)

Intending breast physician trainees must apply to the ASBP for Registrar membership, and must demonstrate the following:

- satisfactory completion of two postgraduate years of training, ie PGY1 and PGY2 and
- current registration with the Australian Health Practitioner Regulation Agency (AHPRA) or the Medical Council of New Zealand (MCNZ)

Fellowship of the ASBP is awarded following:

a. satisfactory completion of the ASBP training program under a supervisor in a facility that meets the standards of the ASBP (see below) and

b. satisfactory performance in the ASBP Part 1 and Part 2 examinations and

c. submission of documentation confirming completion of the following components of training as outlined in page 6 of the training manual.

Recognition of prior learning

It is recognised that Registrars starting the training program might have gained prior medical training or experience comparable with components of the training program.

In some cases, the period of training may be shortened where the candidate's training and experience are equivalent to those in the ASBP training program.

For candidates who undertake the examination after more than three years' training, their total training time undertaken prior to the examination may, at the discretion of the Board, be counted towards their overall training period of five years.Exemption cannot be granted for the Part 1 or Part 2 components of the Fellowship examination.

Individual application for recognition of prior learning must be made in writing to the Censor-in-Chief, for consideration in conjunction with the Board.

The ASBP examinations

The examination process includes a range of formats to ensure that candidates have optimal opportunities to demonstrate their knowledge, clinical competence and professional qualities. The examinations consist of two parts.

Part 1:

The Part 1 examination consists of a written paper, multiple choice paper, two oral examinations, an objective structured clinical examination (OSCE) and an imaging and interpretation component. It may be undertaken at any time following satisfactory completion of a minimum of three years' full- time training (or the part-time equivalent). Candidates must provide a Certificate of Satisfactory Completion of Training (Part 1) from their supervisor. This

includes logbook evidence of the following:

a. 500 clinical examinations of the breast

b. Interpretation of 250 ultrasound studies of the breast and

c. Performance of 250 image-guided interventional procedures.

The Part 1 examination is held every one to two years. The venue varies and is influenced by the number and location of candidates.

Part 2:

The Part 2 examination consists of:

1. An oral examination
2. Satisfactory completion of a research or clinical audit project (see note page 15) .
3. Mammographic screen reading examination.

It is undertaken after evidence of satisfactory completion of the five year ASBP training program.

Candidates for the Part 2 examination must provide a Certificate of Satisfactory Completion of Training (Part 2) from their supervisor.

Examiners are experienced Fellows of the ASBP. Radiologists and surgeons who work predominantly in breast diagnosis might be invited to participate as examiners in the oral sections.

Once a Registrar and the supervisor are satisfied that the criteria for sitting the relevant examinations have been met, an application should be submitted to the ASBP. The candidate will be told the next examination date and the relevant fee.

Training centres and supervision

a. Clinical setting

A Registrar requires clinical involvement of sufficient volume and in a diversity of breast problems to develop competence in diagnosis and management. This might require that additional clinical and imaging training might need to be undertaken at another breast facility. The clinical setting of the training post may be in either a screening or a diagnostic environment whose radiology practice must be accredited with the Royal Australian and New Zealand College of Radiologists. Independent breast clinics without on-site imaging must have access to high quality imaging in a practice with mammographic accreditation.

It is expected that breast centres, such as The Sydney Breast Clinic, The Wesley Breast Clinic in Brisbane, the Westmead Breast Cancer Institute, The Australian Breast Centre in New South Wales, Breast Associates and St Mark's Breast Centre in Auckland, and BreastScreen Australia and New Zealand screening and assessment services, could provide the range of clinical experience, resources and equipment required of a training position *(see Appendix 3: Standards for the breast training facility).*

b. Supervision

Although Registrars are expected to take responsibility for directing their own learning from the curriculum while engaged in their work, the supervisor's role is vital.

The supervisor or co-supervisor must hold a current Fellowship of the ASBP *(see Appendix 4: Standards for supervisors).*

Members of the Breast Section of the Royal Australasian College of Surgeons (RACS), Breast Surgeons Society of Australia and New Zealand (BreastSurgANZ) and members of the Breast Imaging Group of the Royal Australian and New Zealand College of Radiologists (RANZCR) may provide supervision within their areas of expertise if an ASBP Fellow can not be available on a regular basis at the Registrar's place of work.

c. Professional development

Access to professional development activities should also be available. Registrars are required to participate in the ASBP Continuing Professional Development program. Teaching in the main categories of expertise listed should be predominantly through the initial observation of cases managed by experienced breast physicians, radiologists and surgeons. Subsequently, the Registrar should manage their own cases under appropriate supervision.

Teaching will also involve regular involvement in case presentations, preferably in a multidisciplinary setting, such as case review meetings involving surgeons, radiologists and pathologists. Screen reading skills should be developed through discussion of each set of patient's mammograms with the radiologist and/or a senior breast physician.

The Registrar must attend workshops, conferences, and tutorials relevant to breast disease. *(see Appendix 2: Standards for support of breast physician training).*

d. Performance appraisal

To provide the Registrar with feedback, a performance appraisal must be undertaken three to six months after commencement of training. Both self-assessment and appraisal by the supervisor can help identify gaps in knowledge and skill which require further study and practice.

The assessment of Registrars

Assessment helps breast physician Registrars and mentors to appraise their current level of training. It helps identify strengths and weaknesses, allowing further development of learning objectives as outlined by the Training Document.

The assessment forms have been designed to encapsulate these issues, assisting Registrars to critically analyse their levels of competence in various aspects of clinical practice and knowledge. It is important that issues arising from self-analysis should be addressed in order to identify learning goals for future training. Self-assessment should be discussed with the supervisor immediately after the assessment.

This will enable the Registrar and supervisor to discuss competencies learned so far and to plan further learning strategies.

Methods used to appraise performance should include:

a. comments received after direct observation by the supervisor

b. clinical case review with the supervisor

c. medical record/ letter review

d. feedback by staff/ patients

e. discussion with a peer or supervisor

f. clinical audit

g. critical incident analysis and

h. self-assessment of skills and knowledge. The supervisor must take responsibility for checking that the Registrar has completed the education program curriculum prior to the candidate's presenting for the ASBP's examinations. Each Registrar must keep a log- book to provide robust evidence of clinical experience. A more detailed three-month log- book must be sighted at the formal examination. A log-book spreadsheet and copies of the assessment forms can be downloaded from the website, www.breastphysicians.org.

Recommended Reading

A list of suggested texts and journals can be found on the website www.breastphysicians.org

2. Learning modules

The education program has been set out in learning 'modules,' which provide a summary of the knowledge and skills breast physicians should acquire during their training. Each learning module has a list of aims and a curriculum relevant to that section.

The ASBP appreciates that not all breast physicians work in centres where their responsibilities would include all these modules. However, candidates for examination need to be aware that aspects of all modules are open to inclusion in the Part 1 and Part 2 examination process.

It is considered that acquisition of the required formal knowledge base would require a minimum of three years in a full-time capacity. Most of the ongoing assessments mentioned in each learning module are based on the Registrar's log-book, a useful tool for identifying the Registrar's development of knowledge and skill. Only one log-book will be needed to record learning for the whole curriculum. It should be referred to with the supervisor as often as possible.

The Learning Modules have been divided into two Sections:

Part 1 – Foundations of breast medicine

Part 2 – Diagnosis and management in breast medicine

Part 1: Foundations of breast medicine

1. Normal structure and function: embryology, anatomy, physiology and endocrinology

Aims

To acquire

a. understanding of the embryonic stages of development

b. knowledge and understanding of normal intra-mammary and regional anatomy

c. understanding of the effects of normal physiological changes on breast structure and function and

d. understanding of the effects of normal endocrine functions on the apocrine function of normal breast tissue.

Curriculum

a. Self-directed learning from standard texts

b. Discussions with breast surgeons, pathologists and radiologists and

c. Discussion of specific cases with supervisor.

2. Principles of epidemiology and population health strategies

Aims

a. to understand the epidemiological principles underlying the screening of asymptomatic populations for sub-clinical disease

b. to understand the principles of population-based mammographic screening programs and

c. to understand the rationale of BreastScreen Australia and the key performance indicators necessary to achieve the expected reduction in mortality from breast cancer in Australia.

Curriculum

a. Incidence of breast cancer (variations with age, type of population)

b. Relative and absolute risk

c. Effectiveness of different screening strategies (self-detection, clinical examination and mammographic screening)

d. Effective screening of young women, those with dense breasts, those using hormone replacement therapy (HRT) and women at high risk

e. Key performance indicators of mammographic screening programs, including participation rates, rescreening rates, recall rates and breast cancer detection rates

f. Standards for sensitivity, specificity and positive predictive values

g. Interval cancers and

h. Outcomes from screening programs, including the projections, implications and benefits of pre-clinical cancer detection and of earlier detection of invasive disease on treatment outcomes, on loco-regional recurrence and distant metastases, on disease-free survival rates and on mortality.

3. Principles of mammographic image acquisition and radiation safety

Aims

a. to develop knowledge and understanding of:
   i. the principles of digital and film-screen mammography
   ii. the principles required to achieve high resolution, high contrast mammographic images
   iii. a systematic approach to breast imaging
   iv. quality assurance activities relating to film imaging and processing and
   v. patient positioning techniques and specialised views.

b. to understand radiation safety, including the biological effects of radiation, radiation protection of the patient and staff, and dose reduction techniques and

c. to be familiar with regulatory requirements with respect to radiation and licensing of equipment and operators of X-ray equipment and handling of radioactive substances.

Curriculum

a. Mammographic equipment and image processing

b. Overview of quality control and performance tests in mammography

c. Factors affecting radiation dose and image quality

d. Patient positioning for standard and specialised views

e. Identification and image labelling requirements

f. Imaging the augmented breast

g. Post-operative imaging (post-mastectomy, after local resection, post-radiotherapy)

h. Pre-operative localisation techniques and

i. Post-operative specimen radiography.

4. Principles of breast ultrasound

Aims

To develop knowledge and understanding of:

a. the physical principles of breast ultrasound

b. the basic principles of operation of the imaging and recording equipment

c. the practical application of the above principles in real-time evaluation of breast tissue

d. quality assurance procedures pertaining to ultrasound equipment and images

e. the limitations of breast ultrasound and

f. the principles of ultrasound-guided interventional procedures.

Curriculum

a. Completion of a recognised ultrasound course (including a physics component) approved by the Society (this would normally be undertaken as part of the CCPU above)

b. Principles of image formation, including pulse-echo and Doppler techniques

c. Image optimisation in real-time scanning, including harmonics, beam steering and transducer choice

d. Recognition of artefacts and their diagnostic application

e. Knowledge of breast anatomy as it relates to ultrasound appearances

f. Understanding of the possible biological effects of the interaction of ultrasound with tissue

g. Identification and image labelling requirements and

h. Overview of quality control and performance tests.

5. Principles of MRI and MRI safety

Aims

a. to understand the basic principles of MRI examinations of the breast

b. to understand the sensitivity and specificity of breast MRI examination and

c. to understand the specific safety implications of breast MRI procedures and the use of contrast media.

Curriculum

a. Indications for recommending MRI

b. Understanding the role of MRI as an diagnostic tool additional to mammography and ultrasound

c. Understanding MR findings – foci, mass enhancement, non-mass enhancement

d. Understanding kinetic curves and their implications

e. Understanding safety measures required for patients undergoing MR examination – metals check, use of contrast media and precautions required, eg. allergy and renal impairment and

f. Understanding hormonal fluctuations and their subsequent effect on the MR examination – include ideal timing of procedure in pre-menopausal women and those on hormone replacement therapy.

6. Other diagnostic modalities

Aims

a. to be be familiar with other proven, unproven and emerging diagnostic modalities and

b. to understand the role of new modalities in current practice.

Curriculum

a. Tomosynthesis

b. Nuclear scanning

c. Breast density measurement

d. Elastography

e. Thermal imaging and

f. X-ray diffraction pattern of hair.

Part 2: Diagnosis and management in breast medicine

1. Clinical skills

Aims

a. to learn the components of a breast history and their relevance to the investigation of breast symptoms and signs

b. to develop skill in clinical examination of the breast

c. to develop skill in appropriate management of breast symptoms and signs

d. to develop an understanding of reproductive endocrinology and its application to the aetiology and management of breast changes and

e. to develop an understanding of this component of the 'triple assessment' approach to diagnosis.

Curriculum

a. Components of breast history-taking and clinical examination

b. Symptoms and signs of breast disease

c. Anatomy, physiology and pathology of the breast in benign and malignant disease and

d. Hormonal interactions affecting breast structure and function.

2. Communication skills and counselling

Aims

a. to develop effective communication strategies between the doctor and patients presenting with a range of breast symptoms

b. to develop effective communication strategies with other health care providers

c. to consolidate counselling skills to reduce anxiety in patients presenting with breast symptoms

d. to recognise the psychosocial sequelae of a breast cancer diagnosis and develop methods to assist patients' coping skills and

e. to develop knowledge of resources and support agencies available to patients and their doctors.

Curriculum

a. Effective communication, including explanation, problem-solving and acknowledgement of feelings and anxieties

b. Effective verbal and written communication skills with other health professionals involved in the patient's care

c. Appropriate approaches to breaking bad news

d. Provision of information and involvement of the woman in decision-making

e. Addressing patients' cultural diversity, diverse knowledge and abilities

f. Communicating with women of culturally and linguistically diverse backgrounds and using interpreter services

g. Informed consent

h. Privacy issues and

i. Medico-legal, ethical and statutory considerations.

3. Benign breast disease

Aims

a. to develop a detailed knowledge of benign breast conditions and developmental abnormalities

b. to understand the natural history of conditions associated with an increased risk of breast cancer

c. to develop skill in the management of the above conditions, including the appropriate imaging and interventional techniques for diagnosis

d. to develop an understanding of surgical procedures for benign breast disease and

e. to develop an understanding of reproductive endocrinology and the effects of endogenous and exogenous hormones on breast structure, function and epithelial proliferation.

Curriculum

Aetiology, natural history, clinical presentation, investigations, imaging features and management of:

a. congenital abnormalities and aberrations of normal development

b. proliferative breast conditions

c. proliferative breast conditions with atypia

d. reactive or inflammatory conditions

e. gynaecomastia

f. nipple changes and discharge and

g. mastalgia.

4. Malignant breast disease

Aims

a. to develop a detailed knowledge of insitu and invasive malignant breast disease

b. to develop and promote a holistic approach to the care of a patient with breast cancer

c. to develop skill in the diagnosis of malignant breast disease

d. to develop and promote a multidisciplinary approach to the management of breast cancer

e. to understand the management of in situ and invasive breast cancer

f. to be able to classify breast cancers and discuss the significance of prognostic indicators as well as to particularise this discussion to an individual patient's situation

g. to be able to discuss all forms of breast cancer management: including:

   i. surgery

   ii. radiotherapy

   iii. adjuvant and neo-adjuvant chemotherapy

   iv. hormonal and endocrine therapy

   v. post-treatment symptomatology

   vi. post-treatment surveillance

   vii. lifestyle issues and

   viii. fertility and hormonal issues, including sexuality and contraception.

Curriculum

a. Epidemiology of breast cancer, including all histological subtypes

b. Participation in multidisciplinary assessment and diagnosis of malignant breast disease

c. Clinical presentation and imaging, cytological and histological features of in situ and invasive breast cancers

d. Multidisciplinary management for a woman diagnosed with breast cancer

e. Principles of surgical management of breast cancer, including:

   i. mastectomy versus wide local excision

   ii. nodal staging procedures, including sentinel node biopsy and

   iii. reconstruction techniques

f. Significance of tumour classification systems, including the TNM system

g. Use of adjuvant radiotherapy according to current guidelines and emerging techniques

h. Use of adjuvant chemotherapy according to current guidelines

i. Use of neo-adjuvant therapy

j. Long-term monitoring of treatment side - effects including cardiotoxicity and effects on bone density

k. Management of metastatic breast cancer

l. Management of locally advanced and inflammatory breast cancer

m. Management of loco-regional recurrence

n. Management of psychosocial issues, including sexual function and fertility

o. Breast cancer in special groups, including young or pregnant women, and breast cancer in men and

p. Appropriate involvement of palliative care services.

5. Principles of mammographic interpretation

The ASBP endorses the principle of double-reading of all mammographic images, with at least one reader being a Fellow of the RANZCR.

Aims

a. to develop skill in interpretation of the full spectrum of mammographic findings

b. to develop a systematic approach to the interpretation of breast imaging and to the

further assessment of mammographic abnormalities

c. to understand when further assessment of mammographic findings is indicated, and the most appropriate forms of further investigations required and

d. to develop an understanding of the relevance of this component of the 'triple assessment' approach to diagnosis.

Curriculum

a. Appearance of normal anatomical structures and parenchymal patterns, including endogenous and exogenous hormonal effects

b. Mammographic appearances of benign lesions

c. Identification of abnormal mammographic features

d. Augmented breasts, surgical scars, post-radiotherapy changes

e. Mammographic appearances pathognomonic for, or strongly associated with, specific aetiology

f. Appropriate management and further investigation of abnormal mammographic findings, including indications for additional views, ultrasound and MRI and

g. Correlation of clinical and imaging findings.

6. Principles of breast ultrasound interpretation

Aims

a. to understand the practical application of the physical principles of ultrasound to real-time evaluation of breast tissue

b. to understand the indications for breast ultrasound examination

c. to be able to detect and evaluate benign and malignant breast disease in real-time examination

d. to evaluate, interpret and report on images, as part of 'triple assessment'

e. to understand the limitations of breast ultrasound and

f. to understand the principles of ultrasound-guided interventional procedures.

Curriculum

a. Indications for breast ultrasound in screening and symptomatic women

b. Appropriate imaging in breast disease

c. Principles of Doppler imaging

d. Image optimisation in real-time scanning including transducer choice, harmonics and beam steering

e. Recognition of artefacts and their diagnostic application

f. Knowledge of breast anatomy as it relates to normal and abnormal ultrasound appearances

g. Knowledge of the ultrasound appearance of physiological variations of breast tissue including pregnancy and lactation

h. Knowledge of typical characteristics of benign and malignant lesions on ultrasound examination

i. Correlation of ultrasound with the other components of the triple assessment of symptomatic patients

j. Knowledge of the principles of ultrasound-guided fine needle aspiration biopsy, core biopsy, vacuum-assisted biopsy, pre- operative localisation and specimen ultrasound

k. Imaging the augmented breast and

l. Post-operative imaging (post-mastectomy, after local resection, post-radiotherapy).

7. Breast MRI interpretation

Aims

a. to develop an understanding of the basic principles of breast MRI interpretation

b. to develop an understanding of the indications and contraindications for breast MRI

c. to understand the indications for breast MRI examination as a screening, diagnostic and therapeutic assessment tool

d. to understand and evaluate breast MRI imaging findings and

e. to understand the principles of breast MRI-guided procedures.

Curriculum

a. Knowledge of MRI appearance of benign and malignant lesions

b. Basic correlation of breast MRI findings with clinical, mammographic and ultrasound findings

c. Indications for MRI in women at high risk of breast cancer, or with dense breasts

d. Use of MRI for evaluation of women with breast prostheses (implants)

e. Understanding of false-positive and false-negative rates of MRI and

f. Basic understanding of how to investigate an abnormal MRI finding – including 'second-look' ultrasound, MR guided biopsy.

8. Image-guided interventional procedures

Aims

a. to develop theoretical and practical understanding of, and skill in performing, image-guided interventional procedures, including fine needle biopsy and core biopsy under ultrasound and stereotaxis, and pre-operative localisation techniques and

b. to develop skill in the correlation of clinical, imaging and pathological findings.

Curriculum

a. Interpretation of imaging findings

b. Indications and protocols for fine needle biopsy and core biopsy

c. Possible risks and complications associated with these procedures

d. Interventional procedures, their risks and benefits, their degree of specificity and sensitivity, and their respective uses

e. 'Triple assessment'

f. Infection control and

g. Vacuum-assisted techniques.

9. Principles of pathology interpretation and correlation

Aims

a. to develop basic skills in recognising cytopathological and histopathological appearances of normal, benign and malignant breast tissue

b. to develop a basic recognition and understanding of commonly used staining techniques

c. to be able to assess the adequacy of fine needle aspirate specimens being sent off-site for cytopathological interpretation and

d. to develop skills in interpreting pathology reports in order to correlate clinical and imaging findings with pre- and post-surgery pathology results.

Curriculum

a. Basic slide preparation of wet-fixed and air-dried specimens

b. Understanding the cytological appearances of normal breast tissue, benign and malignant epithelial lesions, normal and abnormal breast tissue, lymph nodes, pus and cyst fluid

c. Understanding the histopathological features of commonly occurring benign lesions and major subtypes of malignant disease

d. Understanding the significance of molecular biology tumour markers

e. Understanding the relationship between imaging features and pathological features of commonly occurring benign lesions and the major subtypes of malignant lesions

f. Pre- and post-surgical correlation of all cytopathology and histopathology results with the clinical and imaging findings, and identifying discrepancies or anomalies and

g. Attendance at regular multidisciplinary case reviews with surgeons, radiologists and pathologists.

10. 'Triple assessment' Aims:

To understand:

a. the approach for the investigation of clinical breast symptoms and signs and of impalpable lesions detected on imaging

b. the principal aims of the triple assessment, with respect to:

   i. diagnostic accuracy

   ii. pre-operative diagnosis of cancer and

   iii. minimisation of the need for open diagnostic biopsy

c. the components and the application of triple assessment and

d. the principle of applying the results of the triple test and triple assessment appropriately in clinical practice.

Curriculum

a. Individual components of the triple assessment and their accuracy

b. Overall accuracy of triple assessment and

c. Clinical indications for triple assessment. *Explanatory note:* the 'triple assessment' contrasted with the 'triple test':

   The 'triple assessment' is an extension of the 'triple test' concept.

   In the triple *test*, each component score is considered in isolation:

1. the triple test is *positive* if any of the three components is positive
2. it is *negative* if *all* the components are negative.

It is the sole responsibility of the managing clinician to correlate the cytological or histological results with the clinical and imaging findings.

Triple *assessment*, by contrast, is the gold standard, where the findings from each modality are correlated in context, *within a multidisciplinary team approach.* The multidisciplinary team approach is the mandatory setting for all Registrar training facilities.

11. Management of patients at increased risk of breast cancer

Aims

a. to develop skill in risk-management strategies in regard to patients at increased risk of breast cancer
b. to be able to take an extended family history of related cancers
c. to be able to provide an overview to an individual woman of her personal risk, using evidence-based guidelines
d. to understand the role of genetic testing
e. to understand the roles of oncogenes and epithelial growth factors
f. to understand the relevance of breast density and
g. to understand the relevance of lesions with pre-malignant potential.

Curriculum

a. Appropriate surveillance strategies
b. Risk markers, including proliferative breast lesions with malignant potential
c. Assessment of breast density and its implications for risk
d. Family history and known genetic mutations associated with an increased risk of breast cancer, including:
    i BRCA1 and BRCA2 gene mutations and
    ii p53 , ATM, HNPCC and other identified gene mutations
e. Methods of assessing risk
f. Roles and specific limitations of assessment modalities
g. Options of risk-reducing surgery, including mastectomy and salpingo-oophorectomy
h. Use of hormone replacement therapy, combined oral contraceptives and other exogenous hormones in normal- risk and increased-risk women
i. Clinical trials for breast cancer prevention
j. Counselling skills specific to patients at increased risk and
k. Privacy protocols.

3. Research or clinical audit

Mandatory research or clinical audit project

Aims

a. to promote evidence-based clinical practice

b. to promote an understanding of the processes of research and clinical audit

c. to encourage an attitude of enquiry and clinical questioning and

d. to encourage contribution to the body of knowledge and literature in relation to breast disease.

Curriculum

a. Registrars are required to develop, conduct and present a research or clinical audit project during their course of their training.

b. The research or clinical audit project will be conducted by the Registrar under the guidance of the supervisor. Input from other clinical or research experts is encouraged.

c. The topic for the project should be determined by the Registrar and the Supervisor. It should be developed around a specific clinical question related to breast medicine.

d. The research or clinical audit project will normally be undertaken in addition to clinical work during the period of training in breast medicine. A period of full-time research is not a requirement.

e. The training supervisor should make time available for the Registrar to undertake the project.

To fulfil the research requirement, the project must be presented in an appropriate scientific forum, which may include:

a. Presentation of a paper at an ASBP registrar workshop or a multidisciplinary forum approved by the ASBP Board

b. Presentation of a paper or poster at a scientific meeting for which abstracts are subject to a review and selection process

c. Publication in a peer-reviewed scientific journal and/or

d. Presentation of a dissertation or thesis as part of a higher degree undertaken during the period of training.

Evidence of completion and presentation of the project is essential for the awarding of the Fellowship.

Note: Research projects previously undertaken in other disciplines may be submitted to the Board for consideration.

Appendix 1

Recommended training program

As with employment in any new organisation, the Registrar should undergo basic orientation with the unit manager to meet the other members of the multidisciplinary team and to have the levels of responsibility of each member outlined.

The Registrar should be acknowledged as a fully qualified doctor possessing sound clinical practices.

Training should be directed towards making Registrars competent and safe in their work by gradually delegating to them tasks of increasing responsibility.

It is almost impossible to specify the time it will take a particular Registrar to become proficient. This will depend on patient workload, availability of trained teaching staff and personal differences in learning abilities. Many of the required skills will be developed simultaneously, but with overlapping rates of learning depending on the profiles of the patients encountered.

This suggested training program is an outline of the basic areas of breast medicine to which the Registrar should be exposed – it does not imply that competence in these areas will be developed within a specific timeframe.

It is expected that a Registrar will have a sound academic understanding and knowledge of breast medicine after three years of full-time training.

Application of this academic experience to reach an appropriate level of specialist expertise requires longer clinical exposure – a total training period of five years is considered appropriate.

However, in keeping with the categories of knowledge and clinical expertise discussed in this document, a Registrar should develop their skills by:

In respect of clinical expertise,

a. accompanying an experienced clinician, for example, a senior breast physician or senior breast surgeon, when consulting patients with breast symptoms

b. developing a sound technique in clinical examination of the breasts, initially in conjunction with an experienced surgeon or breast physician and

c. developing increasing knowledge of breast signs through observation with experienced clinician(s).

In respect of imaging,

a. observing radiographers perform mammography, including work-up views

b. discussing the importance of positioning the patient and the role of specific mammographic views

c. discussing and developing an understanding of, and an appreciation of the importance of, image quality assessment and control procedures in producing high-quality images

d. using an images library, if available

e. viewing and discussing mammograms with a senior breast physician and radiologist

f. discussing the theory of ultrasound, the operation of ultrasound equipment, the importance of image optimisation and the minimisation of artefacts

g. observing or performing sonographic examination of the breast under the supervision of an experienced sonographer, radiologist or breast physician and

h. self-directed study of texts on breast imaging.

In respect of counselling,

a. 'sitting in' on patient consultations with experienced clinicians and counsellors when management of the presenting problem is to be discussed – this might often involve the breaking of bad news (patient consent for the Registrar's attendance should first be obtained by the supervisor)

b. discussing strategies of effective communication skills with clinical staff

c. being supervised by an experienced clinician when discussing test results and

d. self-directed study on the psycho-social sequelae of a breast cancer diagnosis or of being at increased risk.

In respect of interventional procedures,

a. discussing the technique of needle biopsies and observing its performance by experienced clinicians

b. practising fine needle biopsy (including with ultrasound guidance) on a suitable 'phantom' before supervised performance on a patient – large simple cysts are recommended as good clinical presentations on which to perfect technique

c. practising ultrasound core biopsies on a 'phantom' prior to supervised performance on a patient

d. developing increasing knowledge of the correlation of imaging, cytology and histology

e. observing stereotactic biopsies prior to supervised performance

f. viewing cytology and histology slides with the pathologist and

g. consolidating knowledge of infection control, incident-reporting and informed consent.

Appendix 2

Standards for the support of breast physician training

The aim of breast physician training is to improve experience in the clinical practice of breast medicine while providing assessment in a clinical setting. Therefore, the supervisor must satisfy certain standards of support for the Registrar:

a. the Registrar must be given the opportunity to develop knowledge and skill in breast medicine within a safe and supportive environment

b. adequate numbers of experienced medical staff with appropriate qualifications in breast disease must be available to teach and supervise the Registrar

c. administrative staff should be available to support the Registrar in organisational matters

d. relevant high quality educational resources should be available to support key areas in the curriculum, for example, an imaging (mammography and ultrasound) library, pathology slides, medical library access

e. release to attend relevant courses and conferences, including financial support, should be available

f. provision for flexibility of work hours, including part-time training, should be offered where possible

g. an initial orientation to the training unit and to its staff, including introduction to data management systems, should be provided on commencement in the position and

h. training in basic occupational health and safety issues should be provided and should include infection control policy.

Appendix 3

Standards for breast training facilities

Training facilities for Registrars should satisfy the following requirements:

a. the breast unit should have clearly documented clinical policies and procedures which are readily available at all times

b. the breast unit must provide excellent learning opportunities for the Registrar to be exposed to a wide range of breast conditions

c. the unit should offer the full range of standard investigations of breast symptoms or signs, namely imaging, interventional investigations, pathology, surgical opinion and counselling, and should also offer management-planning advice subsequent to the initial presentation

d. there should be a set of reference materials and patient-information products available

e. there should be access to a breast imaging film library with mammograms, ultrasound images and clinical notes on individual case studies both benign and malignant imaging features should be included

f. the Registrar should be allowed adequate time to learn new skills as well as to develop clinical expertise

g. service demands should not be excessive and should consider both the needs of patients for continuity of care as well as the educational needs of the Registrar and

h. unit staff should be informed of the level of responsibility expected of the Registrar.

Appendix 4

Guidance for supervisors

An integral and crucial part of the education and training of Registrars is the provision of high-quality, regular and formative assessment with constructive feedback.

The role of the supervisor includes:

a. undertaking supervision of the Registrar's experience in the breast unit and being available to guide learning and provide support when required, in order to gradually increase the Registrar's experience and responsibility

b. ensuring that the Registrar has a balanced workload which encourages a breadth of experience and adequate learning opportunities and

c. completing the required Assessment Forms and Certificates of Satisfactory Completion of Training.

Responsibilities of the supervisor include:

a. providing a range of teaching methods, including direct observation, participation in clinical procedures, discussion of clinical problems, joint consultations, formal teaching of topics

b. providing feedback on clinical strengths and weaknesses, consulting style and communication and counselling skills

c. having a means of identifying gaps in an individual Registrar's training and being able to facilitate further training opportunities: for example, by assisting at operations, visiting radiotherapy or oncology units etc

d. being able to identify unsatisfactory progress and having a procedure to counsel the Registrar accordingly and

e. communicating with the ASBP Censor in the event of any problems regarding the training program or the Registrar.

In order to qualify as a supervisor, the supervisor must:

a. hold unrestricted registration as a medical practitioner with the Australian Health Practitioner Registration Authority (AHPRA)

b. be a Fellow of the Australasian Society of Breast Physicians and

Note:

In some situations, other clinicians may be granted supervisory status relevant to their specialties.

In these circumstances, the Registrar must

a. apply to the ASBP Board for approval and

b. identify a Fellow of the ASBP as co-supervisor or apply to the ASBP Board for appointment of a co-supervisor.

The role of a co-supervisor includes identifying training gaps in a specific facility and assisting the Registrar in addressing these, and providing overall mentorship to the trainee.