HONG KONG COLLEGE OF RADIOLOGISTS

Higher Training (Radiology)

Subspecialty Training in Breast Radiology

[This document should be read in conjunction with the ***General Guidelines on Higher Training (Radiology)***]

1 INTRODUCTION

1.1 Breast radiology involves both symptomatic and screening work.

1.2 All trainees should already have some basic knowledge of breast diagnosis in their pre-fellowship training, mainly as an observer. The subspecialty training outlined will extend this role into the practical situation. In breast imaging, an understanding of the normal physiology and pathology of benign and malignant breast conditions is important.

1.3 Breast Radiology is a category A subspecialty.

1.4 Training period of 3 months, 6 months or 1 year can be acceptable.

2 OBJECTIVES

2.1 For 3 months of training, the trainee would be expected to have knowledge or experience of the following:

(a) The principles of current practice in breast imaging and breast cancer screening
(b) Breast physiology
(c) Medical physics and radiation protection in respect of mammography and related procedures
(d) Breast pathology and clinical practice relevant to clinical radiology
(e) Mammographic reporting sessions (screening and symptomatic)
(f) Breast assessment clinics / Breast clinical radiological conferences / Combined meetings
(g) The proper application of other imaging techniques to this specialty (e.g. ultrasound, magnetic resonance imaging, nuclear medicine.)
(h) Breast biopsy and localization techniques

2.2 For 6 months of training, in addition to the above, the trainee on completion of training should have:

(a) An in-depth understanding of breast disease in particularly breast cancer
(b) A clear understanding of the role of imaging in the early diagnosis of breast cancer
(c) Development of the necessary clinical and management skills to enable radiologists to become an integral part of a multidisciplinary breast team in both symptomatic and screening settings

3 **TRAINING REQUIREMENT**

3.1 TRAINING CENTER REQUIREMENT (M= mandatory D = Desirable)

3.1.1 Equipment Requirement

Dedicated mammography machine	M
Dedicated mammography processor	M
Stereotactic device	M
Ultrasound service	M
Mammogram viewing device	M
MRI service	D
Nuclear Medicine service	D

3.1.2 Departmental Case Load / year

	No. of Examinations	***RIS Coding***	
Mammogram Total	>1200	5001	M
Ultrasound	> 200	5008 + 3209	M
Biopsies	> 200	5005+ 5009 + 5010 + 5011 +5012	M

3.1.3 Supporting Departments & Functions

Breast surgeon		M
Pathologist		M
Dedicated radiographers who perform mammogram regularly	1 certified* radiographer performing at least 200 mammograms / year	D
Combined Meeting / CRC/Assessment Clinic	Once per 2 week	M Preferably once per week

* Postgraduate Certificate in Mammographic Studies – e.g. Nottingham UK

or Certificate of Clinical Proficiency in Mammography (Australian Institute of Radiography) or Advanced Breast Imaging Certificate (Australian Institute of Radiography)

3.1.4 Quality Control Program

(a) Technologist's checks
(b) Professional quality improvement program – system for reviewing outcome data from mammography screening. Follow up on the disposition of positive mammograms and correlation of surgical biopsy results with mammographic reports.
(c) Audit of biopsies

3.2 TRAINER REQUIREMENTS

A **subspecialty trainer** should fulfill all or most of the following criteria:

(a) Previous training in breast imaging
(b) At least 2 years of experience in breast imaging

(c) Major portion of clinical practice in breast imaging
(d) Read at least 1000 mammograms (patients) per year
(e) Related publications, lectures / presentations and attendance of conference related to breast diseases in recent years.

3.3 DURATION OF TRAINING

3.3.1 Minimum allowable training - This can be accomplished in 3 months for a radiologist who likes to have a better exposure to breast imaging and who has more than one subspecialty interest.

3.3.2 Basic training – 6 months. This is for radiologists who would like to have a more in depth training in breast radiology.

3.3.3 Extended training – 1 year. For radiologists who would like to subspecialize in Breast Radiology in the future.

3.4 DUTY SESSIONS

Please refer to the general guidelines in higher training

3.5 MINIMUM NUMBER OF EXAMINATIONS REQUIRED

	Minimum Workload	***RIS Coding***	***Remarks***
Mammogram	Total 500 examinations	5001	Half supervised Half independent
Biopsies-Ultrasound guided	40 examinations with a minimum of 10 exam in US guided biopsy, 10 exam in stereotactic biopsy and 4 exam in hookwire placement / suction biopsy	5011 + 5012 = 10 or more 5009 = 14 or more 5005 + 5010 + manual logged stereotactic hookwire placement = 4 or more 5011 + 5012 + 5009 + + 5005 + 5010 = 40 or more	Some knowledge and observation in suction biopsy is preferable
Biopsies – Stereotactic			Including hookwire placement and stereotactic biopsy. Some knowledge and observation in suction biopsy is preferable
Breast Ultrasound	100 examinations	3209 + 5008	
MRI	some exposure	8301 + 8302	MRI of breast
Pathology	some exposure		To acquire knowledge about cytology and histology of breast diseases.
NM	some exposure	9731 5016 & 5017	Sentinal node imaging Radioisotope localization of occult lesion

Notes:
Code 9731 is Radionuclide lymphangiography and is not specific for breast. Separate log will be needed for sentinal node imaging for Ca Breast
Code 5016 & 5017 is radioisotope localization of occult lesion by stereotactic & by ultrasound guided respectively
Code 8301 is for non-contrast MRI Breast. 8302 is for contrast MRI Breast.
Code 5011 & 5012 are for non-stereotactic FNA or core biopsy
Code 5005 is for ultrasound hookwire placement,
Code 5009 is for stereotactic biopsy & stereotactic hookwire placement
Code 5010 is for mammotome biopsy. It can either be done by ultrasound or stereotactic
Other newer biopsy methods such as Vacora and en-bloc which are not included in the work load unit code can be logged manually

3.5.1 The minimum workload above refers to a training period of six months. For a training period of three months, the minimum workload required will be reduced by half (except for biopsies see 3.5.2). Similarly, for a training period of one year, the minimum workload required will be doubled.

3.5.2 The number of biopsies required for a training period of 3 months should be the same as that of 6 months to allow the trainee to acquire the appropriate skill.

3.6 CLINICAL RADIOLOGICAL CONFERENCES AND OTHER MEETINGS

The participation in assessment Clinics / combined Meetings /CPC /CRC should be at least once per 2 weeks.

3.7 PRESENTATIONS AND PUBLICATIONS

Please refer to the General Guidelines in Higher Training.