HONG KONG COLLEGE OF RADIOLOGISTS

Higher Subspecialty Training in Positron Emission Tomography / Computed Tomography

*[This document should be read in conjunction with the **Guidelines on Higher Specialist Training (Nuclear Medicine)**]*

1. INTRODUCTION

1.1 Positron Emission Tomography (PET) is a major functional imaging tool applicable in particular Oncology, Cardiology, Neurology and infection/inflammation imaging. Computed Tomography (CT) scan can provide fast attenuation correction and anatomical details.

1.2 This subspecialty training provides the trainee with special expertise to practice clinical PET/CT.

1.3 The subspecialty training in PET/CT would be an integral part of Higher Specialist Training (Nuclear Medicine) and each trainee is required to have minimum of 6-month mandatory subspecialty training in PET/CT.

2. OBJECTIVES

The aim of the subspecialty training in PET/CT is to ensure a trainee at the end of training period to have:

2.1 Detailed understanding of indications for clinical PET/CT examination, the production and safe use of PET tracers, patient preparation for different PET procedures, basics of instrumentation and data processing, methods of quality control and image interpretation.

2.2 Understanding of the principle and basic skills of helical / spiral and multi- detector CT and CT anatomy in various parts of the body.

2.3 Knowledge of related radiation risk and protection, and to minimize or optimize the radiation dose in PET/CT scanning.

2.4 Ability to prescribe, perform and interpret PET/CT studies using state-of-art equipment and technique, including optimal utilisation of IV contrast.

2.5 Hands-on supervised experience of an adequate number of procedures.

2.6 Ability to manage clinical consultation related to the subspecialty.

2.7 Competence in clinical rounds and meetings.

2.8 Exposure to PET/MR is optional but preferred.

3. TRAINING REQUIREMENTS

3.1 TRAINING CENTRE REQUIREMENTS

3.1.1 At least one PET/CT scanner with an annual caseload of more than 2000.

3.1.2 Physicist, Scientific Officer support.

3.1.3 Cyclotron facility and radiopharmacy are optional.

3.2 TRAINER REQUIREMENTS

As specified in the Guidelines on Higher Specialist Training (Nuclear Medicine).

3.3 DURATION OF TRAINING

This duration of this mandatory subspecialty training is 6 months, which can be continuous or separated into two 3-month training period.

3.4 DUTY SESSIONS

3.4.1 No less than four sessions per week specific for the subspecialty.

3.4.2 Attachment to another centre on sessional basis is advisable if exposure to specific examination categories is inadequate or unavailable.

3.5 MINIMUM NUMBER OF EXAMINATIONS REQUIRED IN 6 MONTHS

The minimum workload of a trainee for 6 months of higher subspecialty training in PET/CT is 500. The minimum number for each examination category is as follows:

Examination Category	RIS coding	Requirement
Oncology	9P43-9P49, 9C43-9C49	450
Infection and Inflammation, Neurology & Cardiology	9P13-9P39, 9C13-9C39	50

3.6 CLINICAL MEETINGS, PRESENTATIONS AND PUBLICATIONS

As specified in the Guidelines on Higher Specialist Training (Nuclear Medicine).

3.7 ADDITIONAL NOTES

3.7.1 Trainees should be encouraged to have adequate exposure on non-oncological cases. Elective rotation to other PET centres for such exposure is recommended.

3.7.2 Trainees should have a thorough understanding concerning routine oncological as well as some non-oncological PET/CT preparatory protocols.

3.7.3 Trainees should have a thorough knowledge on PET tracer radiopharmaceuticals and various imaging protocols and patient preparation.

3.7.4 This is not a standalone training programme. PET/CT studies, including the number and contents, performed in rest of Nuclear Medicine specialty training have to be fulfilled before the candidate is qualified to have finished the PET/CT Subspecialty Training.

3.7.5 Trainees are required to receive this mandatory Subspecialty Training in PET/CT in an accredited centre only, which may necessitate reciprocal rotation of trainees among different training centres.

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