

Training Programme (essential elements) Clinical Practical Year (CPY) at Medical University of Vienna, Austria

CPY-Tertial C

Nuclear medicine

Valid from academic year 2022/23

Responsible for the content

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This training programme applies to the subject of "Nuclear medicine" within CPY tertial C "Electives". The training programmes for the elective subjects in CPY tertial C are each designed for a duration of 8 weeks. If the subject in CPY tertial C is being completed over a period of 16 weeks, the specified content shall be treated in greater depth.

3. Learning objectives (competences)

3.1 Competences to be achieved (mandatory)

- A) History taking
 - 1. Taking a patient history (symptoms, current complaints, patient's understanding of the illness)
 - 2. Family history
 - 3. Medication history
 - 4. Evaluation of the clinical information necessary for preparing an assessment; if necessary, collection of further findings and information
- B) Performance of examination techniques
 - 5. Knowledge of contraindications for examinations
 - 6. Checking the validity of the referral to a nuclear medicine examination
 - 7. Checking medication interactions
 - 8. Attendance at examinations
 - 9. Palpation of the thyroid
 - 10. Identifying findings leading to fine needle puncture of the thyroid
- C) Performance of routine skills and procedures
 - 11. Peripheral intravenous cannulation
 - 12. Giving intravenous injections
 - 13. Administering radio-pharmaceuticals and knowledge of their bio-distribution, uptake mechanism and half life
 - 14. Administering medication in relation to an examination
 - 15. Performing a thyroid ultrasound examination
 - 16. Preparing a structured written report including assessment of sonography of the neck
 - 17. Knowledge of indications and contraindications for scintigraphy (taking particular account of: thyroid, skeleton, lung, myocardium, sentinel lymph nodes, kidney)
 - 18. Knowledge of the technical basis of scintigraphy (taking particular account of: thyroid, skeleton, lung, myocardium, sentinel lymph nodes, kidney)
 - 19. Interpreting scintigraphic images (taking particular account of: thyroid, skeleton, lung, myocardium, sentinel lymph nodes, kidney)
 - 20. Preparation of a structured written report including assessment and naming of differential diagnoses in relation to scintigraphy (taking particular account of: thyroid, skeleton, lung, myocardium, sentinel lymph nodes, kidney)
 - 21. Knowledge of the basic statutory regulations relating to radiation protection
- D) Therapeutic measures
 - 22. Knowledge of the indications for radio-iodine therapies (benign, malignant)
 - 23. Knowledge of the pathophysiology of radio-iodine therapies (benign, malignant)
 - 24. Preparation of a structured written epicrisis including recommendation for ongoing management of the patient

- E) Communication with patient/team
 - 25. Communication with patient to explain possible risks and complications of nuclear medicine examinations
 - 26. 26. Communicating with severely ill patients
 - 27. Checking compliance
 - 28. Conservative management of patients with self-limiting disease ("wait and see")
 - 29. Giving main information elements necessary to get informed consent
 - 30. Summarizing the main points of a diagnosis and of the active problem
 - 31. Identifying ethically problematic situations
 - 32. Communicating and dealing professionally with geriatric patients
 - 33. Managing patients with contradictory investigation results
 - 34. Discussing diagnoses/prognoses with patients
- F) Documentation
 - 35. Writing reports
 - 36. Retrieving patient-specific information from clinical data system
 - 37. Working with protocols and guidelines
 - 38. Compliance with legal requirements (Austrian Physicians' Act, Hospitals Act, Insurance Act)
 - 39. Documentation in patient files/report of distinct medical parameters
 - 40. Diagnostic coding

4. Information on verification of performance, on-going assessments

4.1 The following aspects can be assessed in the Mini-CEX:

- 1. Indication clarification
- 2. History taking
- 3. Communication with the patient to explain nuclear medicine examinations

This list can be expanded accordingly.

4.2 The following skills can be assessed in the DOPS

- 1. Application of radio-pharmaceuticals
- 2. Administering medication in relation to an examination
- 3. Performing a thyroid ultrasound scan
- 4. Evaluation of examination
- 5. Writing an examination report

This list can be expanded accordingly.

5. Subject-specific details regarding the CPY tasks

The learning objectives are designed to cover the most common activities encountered in daily clinical practice in Nuclear Medicine and which every doctor should master in terms of nuclear medicine patient care irrespective of their later specialisation. In addition to history taking, these also include the field of application of the various examination techniques, differential diagnostic considerations and their presentation and discussion. Furthermore, CPY students should participate in the performance of modern diagnostic examination techniques, thereby enabling them to deepen their theoretical knowledge.

The following CPY tasks must be completed in the subject of Nuclear Medicine:

(A) Active task – mandatory component	Each 8 weeks
Patient presentation (brief)	6x
Patient presentation (detailed)	2x
Writing a report of findings*	4x
Making a referral	2x
Checking referral for correctness	2x
"State of the art" presentation (20 min)	1x

*The report includes: indication, description of the clinical picture and summary. A review of the findings should take place with differential diagnosis and in some cases an indication should be made as to further methods.

(B) Attendance at training and professional development events – mandatory component		Each 8 weeks
Further training / intern training		2x
(B) Attendance at training and professional development	Points	Fach 8 weeks
events Mandatory elective component	1 011103	
Further training / intern training	2	Elective events Amounting to at least 4 points from at least 2 categories
Participation in state-of-the-art presentations based on specific patients	1	
Attendance at Journal Club	1	
"Morbidity & Mortality" conferences	1	
External training and professional development events per $^{1\!\!/}_{2}$	3	
day (congresses, conferences etc.)		
Course attendance per ½ day (ECG course, ultrasound, suture	3	
course, burnout prevention etc.)		
Non-live events (e.g. Webinars)	1	