



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

CPY-Tertial C

**Thoracic Surgery**

Valid from academic year 2021/2022

Responsible for the content

Ass.-Prof. Priv.-Doz. Dr. Bernhard Moser, MBA PhD FEBTS

This training programme applies to the subject of "Thoracic Surgery" within CPY tertial C "Electives". If "Thoracic Surgery" is being taken within the compulsory CPY tertial B "Surgery and Perioperative Disciplines", in addition to the learning objectives in CPY tertial B, the learning objectives listed in this training programme under Point 3 can be added as optional learning objectives in the logbook for the compulsory CPY tertial B.

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)

The following skills must be acquired or deepened in the subject of Thoracic Surgery during the CPY.

#### 3.1 Competences to be achieved (mandatory)

##### A) History taking

1. Clarifying the patient's expectations and requests for the consultation
2. Taking a systematic history (symptoms, current complaints, the patient's life situation, her/his understanding of the illness and concerns, social and cultural background and illness experience)
3. Taking a targeted, hypothesis-directed history
4. Taking history in patients with special communication needs, e.g. language or speech problems
5. Identifying hazardous behaviour and dangerous lifestyles
6. Communicating in a multi-disciplinary team
7. Retrieving patient-specific information from clinical data system
8. Recording findings in patient file
9. Counselling patients in relation to lifestyle (diet, physical activity, nutrition, smoking, alcohol, illicit drugs)
10. Ascertaining the type and duration of tumour-related symptoms (hoarseness, recurrent paresis, Horner's syndrome etc.)

##### B) Performance of examination techniques

11. Assessment of vital functions (body temperature, respiration, pulse rate, blood pressure, venous pressure)
12. Symptom-oriented examination and the ordering of further diagnostics in acute patient care
13. Assessment and discussion of radiological findings in a clinical context
14. Assessment of perioperative fluid balance and loss of electrolytes
15. Attaching a pulse oximeter and interpreting the results
16. Identifying superficial wound healing problems
17. Identification of post-operative bleeding
18. Participation in the diagnosis of suspected pneumothorax
19. Checking the functioning of drains, particularly thoracic drains

##### C) Performance of routine skills and procedures

20. Using appropriate hand hygiene at the workplace
21. Removal of wound sutures
22. Application of a bandage
23. Maintenance of drains, particularly thoracic drains
24. Performance of perioperative patient safety measures (checklist, sign-in/time-out/sign-out)

25. Preparation to watch/to assist in operating theatre (scrub-up, gown up, sterile gloves etc.)
  26. Handling a central venous catheter
  27. Pre-operative preparation of operative field for minor surgery (asepsis, antisepsis)
  28. Correct removal of drains
  29. Correct removal of a central venous catheter
  30. Correct performance of perioperative thrombosis prophylaxis and wound cleaning
  31. Positioning a permanent peripheral venous cannula
  32. Performing a sterile dressing change
  33. Positioning a urinary catheter
  34. Checking perioperative prescription of medication (low molecular weight heparin, antibiotics, analgesics, etc.)
- D) Therapeutic measures
35. Participation in the treatment of a wound in out-patient setting or in operating room (performance of simple wound treatment by student under specialist medical supervision)
  36. Participation in the performance of measures for secondary wound healing (e.g. VAC system)
  37. Participation in the perioperative management of cardiovascular risk factors
  38. Participation in the treatment of superficial wound healing problems
  39. Participation in the treatment of post-operative bleeding
  40. Participation in the treatment of suspected pneumothorax
  41. Participation in the treatment of suspected pleural effusion
  42. Participation in the treatment of suspected pneumonia
  43. Participation in the treatment of suspected sepsis
  44. Participation in the treatment of suspected haemothorax
  45. Participation in the treatment of suspected chylothorax
  46. Participation in the treatment of suspected pulmonary atelectasis
  47. Participation in the treatment of suspected bronchopleural fistula
  48. Participation in the ordering of treatment measures for dyspnea and/or pain in palliative care
  49. Suture or clips after an operation (under specialist medical supervision)
  50. Incision and drainage of an infected surgical wound (under specialist medical supervision)
  51. Identification of drug side effects and participation in their management
  52. Determining the acute indication, dosage and use of oxygen therapy (under specialist medical supervision)
- E) Communication with patient/team
53. Communicating with severely ill patients
  54. Communicating with "difficult" patients and relatives

- 55. Elaborating a clinical question and searching for its solution in the literature
  - 56. Notification of examination using instruments or of a specialist consultation with detailed explanation
  - 57. Informing colleagues and other professionals on findings and checking understanding
  - 58. Working in a multidisciplinary team
  - 59. Providing information to patients and relatives in an ethically correct and professional manner in compliance with legal requirements and ensuring that the patient has understood the information
  - 60. Giving information to a patient for a planned surgical procedure/endoscopy/ intervention and obtaining consent
  - 61. Summarizing the main points of diagnoses, active problems and management plans of a patient
  - 62. Clarifying with nursing staff monitoring measures and calling criteria concerning patients
  - 63. Managing patients with contradictory investigation results
- F) Documentation
- 64. Recording findings in patient file
  - 65. Filling in prescription forms
  - 66. Writing a detailed referral for an examination (using instruments) (e.g. CT, lung function)
  - 67. Writing a discharge letter
  - 68. Diagnostic coding
  - 69. Requesting information in hospital information system
- G) Pandemic (Covid19) (Information/Management)
- 70. Knowledge, observance and execution of the most up to date University (MedUni Wien)- as well as district and state guidelines and rules concerning self protection and patient management
  - 71. Knowledge, training and observance of safe Donning and Doffing of Personal Protective Equipment (PPE)

### 3.2 Optional competences

In addition to the competences that are mandatory to achieve, further competences from the following list may also be acquired.

For example:

1. Lung transplant: Working in a multidisciplinary team (thoracic surgery/pulmonology/psychology etc.), participation in a patient evaluation
2. Transplant coordination: Participation in the organisation of lung transplants
3. Pulmonary endarterectomy: Working in a multidisciplinary team (thoracic surgery/cardiology), participation in the evaluation and perioperative care of patients with CTEPH

4. Tracheal surgery: Working in a multidisciplinary team (ENT/thoracic surgery), participation in the evaluation of tracheal stenoses
5. Robot-assisted surgery: Insights into the possibilities and limitations of minimally invasive surgery, active participation in discussions and perioperative management
6. Extra-corporeal membrane oxygenation: Indication and management of extra-corporeal membrane oxygenation (ECMO), active participation in daily discussions/patient visit and surgical management (implantation/explantation)

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

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

1. Taking history on admittance of patient to hospital for operation
2. Clinical examination on admittance of patient to hospital for operation
3. Symptom-oriented examination and the ordering of further diagnostics in the case of an acute patient
4. Giving information to a patient for a planned surgical procedure/endoscopy/ intervention and obtaining consent
5. Case presentation during ward teaching rounds (information on active status)
6. Identification of possible risk factors for surgery/anaesthetic and appropriate clarification
7. Assessment of perioperative fluid balance and loss of electrolytes and prescription of appropriate replacement
8. Evaluation of the perioperative nutrition situation and gastrointestinal function
9. Performance of perioperative patient safety measures (checklist, sign-in/time-out/sign-out)
10. Carrying out an assessment algorithm for an acutely ill patient
11. Communicating with "difficult" patients and relatives
12. Assessment of drug side effects and their management
13. Determining the indication, dosage and use of oxygen therapy (timing)

This list can be expanded accordingly.

##### **4.2 The following skills can be assessed in the DOPS**

1. Treating a wound in an out-patient setting or in the operating room
2. Performing a sterile dressing change and wound cleaning
3. Removing sutures and clips
4. Removing drains
5. Performing a suture
6. Preparation of a bodily region for operation (washing and covering)
7. Surgical hand disinfection
8. Handling a central venous catheter

9. Removing a central venous catheter
10. Positioning a urinary catheter
11. Thoracic drainage management/troubleshooting

This list can be expanded accordingly.