MEDICAL UNIVERSITY OF VIENNA

Training Programme (essential elements)

Clinical Practical Year (CPY)

at Medical University of Vienna, Austria

CPY-Tertial C

Cardiac Surgery

Valid from academic year 2026/27

Responsible for the content

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In collaboration with

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This training programme applies to the subject of "Cardiac Surgery" within CPY tertial C "Electives". If "Cardiac 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 Cardiac Surgery during the CPY.

3.1 Competences to be achieved (mandatory)

A) History taking

1. Taking a systematic history (symptoms, current complaints, the patient's life situation, her/his understanding of the disease and concerns, social and cultural background and illness experience)

B) Performance of examination techniques

2. Assessment of vital functions (body temperature, respiration, pulse rate, blood pressure, venous pressure)
3. Assessment of orientation in space and time
4. Examination of peripheral and central arterial pulses, detection of arterial bruits
5. Inspection of shape and mobility of the thorax, testing for pain on percussion and pain on palpation
6. Assessment of respiratory chest expansion by inspection and palpation
7. Palpation of apex beat (heart)
8. Percussion of lungs including respiratory shifting of diaphragm
9. Auscultation of the lungs
10. Auscultation of the heart
11. Assessment of skin and mucous membranes (signs of anemia, cyanosis, jaundice, edema, dehydration)

C) Performance of routine skills and procedures

12. Peripheral intravenous cannulation
13. Removal of drains
14. Removal of wound sutures
15. Preparation to watch / to assist in operating theatre (scrub-up, gown up, put on sterile gloves, etc.)
16. Handling a central venous catheter
17. Pre-operative positioning and preparation of the field for surgery
18. Taking an electrocardiogram at rest
19. Assessing wounds (including stability of the thorax)
20. Removing pacemaker wires
21. Filling out a requisition for instrumental investigations (lab tests, imaging)
22. Filling out a requisition for a consult
23. Handling external and internal defibrillators as well as pacemakers

D) Therapeutic measures

24. Wound closure (e.g. venous graft harvesting site) under medical supervision

25. Stopping hemorrhage (direct pressure, pressure points, pressure bandage, tourniquet)
26. Assistance in heart valve surgery
27. Assistance in coronary artery bypass grafting
28. Assistance in aortic surgery cases
29. Assistance in pediatric cardiac surgery cases
30. Dosage, on-going checking and documentation of oral anti-coagulation
31. Re-admission of a post-operative patient to the normal ward

E) Communication with patients/team

32. Counselling patients in relation to lifestyle (diet, physical activity, nutrition, smoking, alcohol, illicit drugs, postoperative lifestyle)
33. Giving main information elements necessary to get informed consent under supervision
34. Communicating in a multidisciplinary team (including cardiotechnology)
35. Being part of ward management and discharge care (Huddle Board)

F) Documentation

36. Elaborating a clinical question and searching for its solution in the literature
37. Writing letters for transfer or discharge of patient

3.2 Optional competences

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

1. Harvesting of a vein graft
2. Assistance in endoscopic vein graft harvesting
3. Echocardiography to exclude pericardial tamponade
4. Performance of pleural punctures
5. Perioperative metabolic monitoring (blood sugar management)
6. Puncture of the subclavian and jugular vein

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

4.1 The following aspects can be assessed in the Mini-CEX (Mini-Clinical Evaluation Exercise) :

1. History taking and clinical investigation on in-patient admission for an operation
2. Giving information to a patient for a planned surgical procedure
3. Case presentation during ward teaching rounds (information on active status)
4. Determination of risk factors for an operation and relevant clarification
5. Assessment of perioperative fluid balance and loss of electrolytes and prescription of appropriate replacement
6. Assessment of drug side effects and their management
7. Determining the indication, dosage and use of oxygen therapy

8. Accompanying patient transfer to intensive care ward after operation
9. Writing up a medical report on discharge from ward

This list can be expanded accordingly.

4.2 The following skills can be assessed in the DOPS (Direct Observation of Procedural Skills):

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

This list can be expanded accordingly.