



**Karolinska
Institutet**

Course syllabus for

Surgical, endovascular and medical management of cardiovascular disease, 4.5 credits

Kirurgisk, endovaskulär och medicinsk behandling av kardiovaskulär sjukdom, 4.5 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

Please note that the course syllabus is available in the following versions:

Autumn2010 , [Autumn2013](#)

Course code	2LK041
Course name	Surgical, endovascular and medical management of cardiovascular disease
Credits	4.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Medicine
Level	AV - Second cycle
Grading scale	Pass, Fail
Department	Department of Molecular Medicine and Surgery
Participating institutions	<ul style="list-style-type: none">• Department of Medicine, Solna• Department of Global Public Health
Decided by	Programnämnd 2
Decision date	2010-05-11
Course syllabus valid from	Autumn 2010

Specific entry requirements

All The higher education credits from semester 1-3 and passed on the part "Medical diagnostics" in the course the ill man 2 and part "Clinical driving licence" in the course Integrated examination.

Objectives

The general aims of the course are for the students to increase their knowledge of the occurrence of cardiovascular diseases in the population and the very important primary and secondary preventive actions that must be taken to improve public health now and in the future. The knowledge is tiered according to the SOLO taxonomy (S1-S4) and the skills according to Miller's pyramid (M1-M4) *. Knowledge and understanding The student should orally and be able to in writing - explain the development of atherosclerosis (S3) - explain and be able to relate the links between the relevant anatomy, such as vascular events and cardiovascular disease (S3) - account for the occurrence of the

most common cardiovascular atherosclerotic national diseases in Sweden and for the primary investigation that should be carried out at primary care level (S2) - relate clinical diagnostics and diagnostic tools in these diseases to those used within primary care and specialist care, e. g. radiological (S3) - compare and reflect on the modern current medical, radiological and surgical treatment of these diseases that are provided in primary care and specialist care (S3) - At a general level, understand the most common complications of the treatments that are provided in these specialities (S2) Skills: The student should - be able to primary process and diagnose patients from the major disease groups that are included in the cardiovascular disease complex at the level of primary care (M4) - have obtained advanced skills in medical history taking and specific status training (M4) - have increased his/her ability to assess patients' needs of investigation and treatment (M3) Approach: The student should - be able to analyse and explain gender differences within the field (S3) - be able to show a good understanding of modern and future multi-disciplinary treatment of cardiovascular disease (S3)

Content

Diagnostic skills are trained with special focus on this today dominant patient group of the general practitioners. The students will increase their ability to assess patients' needs of an investigation and treatment and will obtain a good understanding of modern and future treatment of cardiovascular disease. Gender perspective and public health perspectives will be emphasised e g possible gender differences in diagnostics, choice of primary and secondary preventive treatment and results of chosen treatment. Our specialities work with an increasing transnational orientation; the previous sharp dividing lines between cardiology, vascular surgery, thoracic surgery and interventional radiology have been erased and cooperation between specialists improve the treatment. This attitude to the patient dominates the course. In the course, small groups may participate actively in patient-close activities; clinics and studies, observing surgery, observing a PCI or PTA (balloon dilatation in coronary vessels or peripheral vessels). The students will be given opportunity to perform angiography on patients in simulators. That all teachers work with clinical research in parallel with their clinical activities will of course permeate the lectures. Strong emphasis is also placed on a scientific attitude when epidemiology, treatment options and results are presented. In the course, elements from a large number are integrated by the defined funktionssystemen, e g the field circulation (e g chest pains, heart murmurs, blood pressures, swelling extremity), hematopoiesis (hemorrhagic disorder, fever), respiration (dyspnea), digestion (e g abdominal pain, abdominal swelling, resistance in the abdomen), mental (e g unconsciousness, anxiety, concern), senses (e g vision disorder, dizziness), skin (intractable wounds, wound), development/aging (e g unexpected death) and movement (e g pain in extremity, abnormal time, paralysis).

Teaching methods

The course can be seen as five general overlapping parts where the common basis is the national disease atherosclerosis. I. Atherosclerosis. Anatomy, physiology, pathology. II. Cardiology i-ii. Peripheral vascular disorder IV. Thoracic Surgery V. Interventional radiology. The Students are introduced primarily to the field with an overview concerning the situation of knowledge in basic atherosclerosis research. Clinical experienced specialists teach specialisation within cardiology, peripheral vascular disorder, thoracic surgery with epidemiological aspects concerning disease occurrence, overview of symptomatology, diagnostics and treatment options with lectures and seminars. During the course, 4-6 typical patient cases will be used during teacher-supervised seminars, where risk factors, investigation within primary care, differential diagnostics, diagnostic aids and treatment options in particular are discussed. The students should also critically review scientific review articles in the area, which then will be discussed in 4 seminars. Practical parts consist of groups of about 3-4 students who participate in specially booked student receptions, student-based ward rounds, radiological practice in coronary vessels and peripheral vessels, and physiological investigations (echo, duplex). In the course is included to see a surgery (thoracic surgical or vascular surgical) in special operating theater or with directly audiovisual transferred from operating theatre with direct contact. Further included is observing a PCI or PTA (balloon dilatation in coronary vessels or peripheral vessels). The students will may test to perform an angiogram of a patient in VIST the simulator on CTC.

Examination

Compulsory parts: Attendance at all student activities in which patients are especially booked, e.g. clinics or ultrasound examinations. Active participation in discussion around review articles. Active participation in the patient cases at a seminar. An assignment concerning the handling of 4 typical patient cases serves as examination. Limitations of the number examination or practical training sessions The number of examination and practical training sessions follows the local guidelines of Karolinska Institutet, implying that the number of examinations is limited to 6, while placement, as a rule, may be repeated only once. Examination The examiner may with immediate effect interrupt a student's clinical rotation (VFU), or the equivalent, if the student demonstrates such serious deficiencies in knowledge, skills or attitudes that patient safety or patient confidence in healthcare is at risk. When clinical rotation is interrupted according to this, it implies that the student fails in the current part, and that one clinical rotation opportunity is used up. In such cases, an individual action plan should be set up for required activities and examinations, before the student is given a possibility for a new clinical rotation in the course. Eligibility A student failing due to shortcoming in knowledge skills or attitudes, thus jeopardizing patient security and/or trust in medical care, could be assigned for a new clinical rotation only after having completed the individual plan.

Transitional provisions

If a course has been closed down or undergone major changes, at least two additional examinations (excluding regular examinations) in the previous contents are provided during a period of a year from the date of the change.

Other directives

The course connects to and enhances core knowledge within the Study Programme in Medicine. Course evaluation take place according to the guidelines that have been stated by the Board of education at Karolinska Institutet. The course may not be included in a degree at the same time as an advanced course completed inside or outside the country, the contents of which fully or in essential parts corresponds to the current course contents. If you are uncertain - contact the study guidance. * The knowledge is tiered according to the SOLO taxonomy: S1) simple (e.g. know, identify), S2) compound (e.g. account for, describe), S3) related (e.g. analyse, relate), and S4) extended (e.g. theorise, analyse). The skills are structured according to Miller's pyramid: M1) know, M2) know how to carry out M3) be able to demonstrate, and M4) be able to carry out in a professional manner.

Literature and other teaching aids

Kirurgi

Haglund, Ulf; Hamberger, Bertil; Arnér, Staffan; Wilhelmsson, Jan

6., [omarb. och uppdaterade] uppl. : Stockholm : Liber, 2005 - 571 s.

ISBN:91-47-05252-X LIBRIS-ID:10030249

[Library search](#)

Kvinnohjärtan : hjärt- och kärlsjukdomar hos kvinnor

Schenck-Gustafsson, Karin; Engquist, Jeanette

Lund : Studentlitteratur, 2003 - 326 s.

ISBN:91-44-02787-7 (hft.) LIBRIS-ID:8975994

[Library search](#)

Läkemedelsboken, n 2007

Stockholm : Apoteket AB, 2007 - 1260 s.

ISBN:91-85574-57-0 LIBRIS-ID:10399282

[Library search](#)

Persson, Stig

Kardiologi : hjärtsjukdomar hos vuxna

Engqvist, Jeanette

5., [rev. och utök.] uppl. /b [tecknare: Jeanette Engqvist] : Lund : Studentlitteratur, 2003 - 247 s.

ISBN:91-44-02377-4 LIBRIS-ID:8803260

[Library search](#)