Course syllabus for

Hematology - from General Practice to University Hospital, 4.5 credits

Hematologi - från vårdcentral till universitetssjukhus, 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:
Autumn2008 , Autumn2009

Course code	LKG056
Course name	Hematology - from General Practice to University Hospital
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 Medicine, Huddinge
Participating institutions	• Department of Laboratory Medicine • Department of Medicine, Solna
Decided by	Programnämnden för läkarprogrammet
Decision date	2008-11-03
Course syllabus valid from	Autumn 2008

Specific entry requirements

Completed programme course in pathology, medical diagnostics and clinical medicine.

Objectives

The overall aims are that the student should obtain advanced knowledge of the most common hematologic diseases and get an understanding of the integration with other subject areas such as pathology, immunology, radiology, transfusion medicine, infection, and intensive care. Another general aim is that the student should get increased insights and understanding of the psychological treatment of patients with a serious disease. The knowledge is tiered according to the SOLO taxonomy (S1-S4) and the skills according to Miller's pyramid (M1-M4) *. Skills The student should Be able to take an internal medicine medical history and status with a hematologic focus (M4) Be able to evaluate symptoms and laboratory results in an out-patient care situation from what should be referred for specialist care (M4) Be able to evaluate symptoms and laboratory results both in an emergency department and in the

hematologic open and in-patient care (M3) Be able to handle an investigation of symptoms such as tiredness, lymph node amplification, infection sensitivity, hemorrhagic disorder etc and laboratory abnormalities such as anaemia, polycythemia, leukopenia, leukocytosis, thrombocytopenia, thrombocytosis, elevated ESR etc within hematology (M3) Be able to conduct a discussion about the problems of a seriously ill patient with a hematologic disease including nutrition, fluid balance, transfusions, coagulation, infections problems, intensive care needs, psychological treatment, life-sustaining treatment restriction (M3) Be able to handle simple and more common acute conditions in a critically ill patient (M4) Knowledge and understanding The student should Be able to demonstrate an understanding and knowledge of how the haematopoietic system works (S2) Be able to demonstrate an understanding and knowledge of where and how the most common hematologic diseases arise (S2) On the basis of symptoms and laboratory parameters be able to pursue an argument of differential diagnoses, (S4) Be able to show an understanding and knowledge of the different diagnostic tools; pathology, cytogenetics, genetics, immunology, radiology, clinical chemistry within hematology and how these are integrated (S2) Know basic treatment principles within the hematology; transfusions, cytotoxin treatment, immunotherapy and stem cell transplantation (S2) Knowledge of evidence basing of investigation and treatment (S2) Approach: The student should Be able to show an adequate and professional patient approach (M4) Be able to adopt a scientific and critical perspective on the basis of evidence in diagnostics and treatment (M3) Be able to identify, discuss and solve specific ethical problems in various situations and at different nursing levels (M3) Be able to show basic knowledge and understanding of the psychological treatment of patients with a serious hematologic disease, and their family (S2) Be able to understand the importance of how information is given to the patient and relatives concerning cancer diagnosis and death information (M3) Be able to relate to the pharmaceutical industry's role vis-à-vis healthcare and the health economics aspects of new and expensive drugs (S3)

Content

The course aims at an understanding of the handling of the patient at different nursing levels, such as primary care, emergency ward, hematologic specialist clinic and intensive care clinic. The relation between healthcare and the pharmaceutical industry, the development of new drugs and health economics aspects will be brought up. The course takes its theoretical origin from the Study Programme in Medicine teaching of hematology up to and including the medicine course and starts with a short repetition and enhancement of the theory underlying blood diseases. The course aims at providing integrated and advanced knowledge, both based on different nursing levels from general medicine to highly specialised and research intense care, and through integration of other medical sciences such as infectious diseases, microbiology, coagulation, pathology, clinical chemistry, immunology and radiology. The course intends also to provide knowledge and skills how on to integrate science, evidence basing, ethics, patient care and attitude to the industry in the daily work. Integrating assignments in the course: Paleness/anaemia Hemorrhagic disorder Enlarged lymph nodes

Teaching methods

The course is designed to give a varied supply of working methods such as lectures, case seminars, group assignments, so called super case auscultations, study visits, participation in rounds, discussion exercises, external placement etc (see further below), lectures and group assignments. Group assignments (2-3 individuals) take place for selected hematologic typical cases, from symptoms and processing within primary care to hematologic specialist clinics. The cases comprise acute leukemia, chronic leukemia, lymphomas, myelom, polycythemia / essential thrombocytosis, myelodysplastic syndrome and benign hematologic conditions. This includes attendance as an observer in hematological open and in-patient care. In groups of about 5 students, a patient case, a so called supercase, will be studied. This includes different issues that will be clarified from a clinical, ethical, scientific and evidence-based perspective. Placement is included through participation in different rounds such as patient rounds, pathology rounds, x-ray rounds, diagnosis conferences, research seminars and clinical seminars. In the course, study visits in connection with group assignments at other specialist clinics,

pathology, transfusion medicine, clinical chemistry, radiology and in the pharmaceutical industry are also included. The clinical service may be located to other hospitals.

Examination

Compulsory parts: group assignments, study visits, clinical duty. Examination: Presentation of group assignments takes place during the last course week (supercase). 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.

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, mainly in the stages of the Study Programme in Medicine B. The examiner may with immediate effect interrupt a student's placement if the student demonstrates such serious deficiencies in knowledge, skills or attitudes that patient safety or patient confidence in healthcare is at risk. If the placement is interrupted, it implies that the student fails in the current part. In such cases, an individual action plan should be set up, where it comes clear which activities and examinations are required, before the student is given the possibility to further placement. * 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

Gahrton, Gösta; Lundh, Bengt (red.)

Blodsjukdomar : lärobok i hematologi

3., omarb. [och utök.] utg. : Stockholm : Natur och kultur, 1997 - 470 s.

ISBN:91-27-04397-5

Library search

Hoffman, Ronald

Hematology : basic principles and practice

4. ed. : Philadelphia : Elsevier Churchill Livingstone, 2005 - xxix, 2821s.

ISBN:0-443-06662-0 (hbk.) LIBRIS-ID:9684062

Library search