



**Karolinska
Institutet**

Course syllabus for

Symptoms, diagnosis and treatment - endocrine diseases, 7.5 credits

Från symptom till diagnos och behandling - sjukdomar i hormonproducerande organ, 7.5 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	2LK042
Course name	Symptoms, diagnosis and treatment - endocrine diseases
Credits	7.5 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 Laboratory Medicine
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 Disease and Illness 2 and part "Clinical driving licence" in the course Integrated preparatory examination and basic experience in patient contact and medical records keeping

Objectives

The general the aim is that the student should have received advanced knowledge of hormonal control systems and effects to understand and be able to derive symptoms on hormonal disease to confirm diagnosis and treatment. This is of importance since the diseases, including several common "national diseases", are treatable and often affects young patients. The knowledge is listed according to the SOLO taxonomy (S1-S4) and the skills according to Miller's pyramid (M1-M4) *. Knowledge and understanding: The student should have knowledge about the most important hormonal control systems, (hypothalamus pituitary gland, thyroid gland, parathyroid gland, pancreas, adrenal glands, gonads and intestine) hormonal effects and signs on hormonal hyper - and hypo- secretion (S4). The student should

understand the relationship between the clinical symptoms and the hormonal diagnoses (S3). The student should know the most important treatment strategies particularly at critical, treatable hormonal diseases (S2). The student should have knowledge on background and reason for diseases in hormone-producing organs to be able to seek additional information and follow the development in the area of (S1). Skills: The student should be able to correctly analyze medical history that contains adequate, necessary and important information for different diagnoses and possible complications (M2). The student should be able to make precise status with a focus on specific studies (M4). The student should be able to suggest investigation programs at suspected diagnosis (M3). The student should be able to interpret and discuss results of investigation suggest possibly supplementary qualifications and also suggest treatment (M3). Approach: The student should have ability to create good contact such as trust and listening with the patient to be able to process investigation, diagnosis, treatment and follow up in the best possible way (M3). The student should have ability to analyze and meet the patient's need of information (M3). The student should have ability to correctly prioritize investigation in a time perspective related to suspected diagnosis and be able to describe this (M3). The student should be able to discuss ethical considerations in chronic disease (M2).

Content

The course intends to an advanced knowledge of hormonal control systems and effects to understand and be able to relate different symptoms to specific diagnoses. Different treatment strategies with specific emphasis on pharmacological replacement are discussed as well as underlying causes for diseases in hormone-producing organs. Diseases in hormone-producing organs include both several groups of national diseases - diabetes mellitus, thyroide-parathyroid diseases and bone metabolic diseases (osteoporosis) - as more unusual disease groups like pituitary, adrenal and hormonal intestinal diseases. Many of these disease groups often develop at an early age. However, with correct treatment, most patients are curable or treatable but without correct diagnosis and treatment critical conditions often arise. Therefore, it is necessary to have as much knowledge as possible in order to understand and suspect a hormonal disease behind sometimes subtle symptoms. Physicians, irrespective of speciality and activities will meet these patients groups in the future. The students are trained in medical history and status in patients with hormonal diseases, above all the "national diseases" diabetes mellitus and thyroid disease. The skills are supplemented with teaching of hormonal control systems, pathophysiology, treatment strategies and pharmacology. Training in information retrieval is included. Teachers from different clinical disciplines with principal responsibility from clinical endocrinology participates in collaboration with clinical pharmacology, image and function and paramedics. The teachers have long-standing experience of a holistic perspective and integration within this area. The course is based on rounds, patient demonstrations, patient conferences and own patients for training under individual supervision with succeeding discussions in seminars. Teaching in the form of seminars. Most hormonal diseases have gender perspectives with different symptoms, incidence and also treatment perspectives, which is an important part in the knowledge dissemination of the course. Ethnicity influences frequency of certain diagnoses. We will particularly discuss attitudes at contact with young newly diagnosed patients where diagnosis requires lifelong treatment and controls often including specific life style (for example diabetes mellitus). We work with major networks of close collaboration between basic science at especially KI and clinical research within all subparts of endocrinology. Several related fields will be clarified in research perspective with discussions concerning current research area. The course will be divided into different knowledge fields where each parts (for example diabetes mellitus, bone metabolic diseases and pituitary diseases) have theoretical introduction, seminars, rounds and individual handling with investigation and treatment. A summary where the participants' patients are presented and discussed followed by an account of the current research area. Individual advanced study project with 1 participant/group. Literature survey, preferably with a current issue (e.g. Indication for minirin to nocturi in children ceases) results of new treatments (e.g. somatatinj/1g/years with clear results of certain fractures in osteoporosis patients) etc. Integrating assignments: 1. Weight loss 2. Large and small amount of urine 3. Tiredness 4. Menstruation disorder 5. Sweating 6. Infertility/sexual dysfunction

Teaching methods

Tuition forms related to the aims of the course: Lectures, seminars, rounds, conferences with and without patients, individual patient care, advancement projects.

Examination

Compulsory parts: Patient contacts on rounds and clinic with keeping of medical records, including the different parts of the endocrinology. Visits at sections within the endocrine network with seminars (the Andrology department, department of Pharmacology and the Radiology department). Passed handling of 5 own patient cases that have processed individually. An individual patient case is presented with a proposal for investigation, diagnosis and treatment in a group with a joint discussion. An individual patient case for follow-up of the nursing process is presented in writing. Approved advanced project with a joint oral presentation for the students in the course and the teachers. Presentation of knowledge in physiology and pathophysiology, in writing. A pass grade in skills presented above: Patient treatment. Co-operation ability. Analysis of patient contact, investigation and treatment. Ability to discuss results and differential diagnoses. 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. 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 takes 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

Diabetes

Agardh, Carl-David; Berne, Christian

4.[rev] uppl. : Stockholm : Liber, 2010 - 502 s.

ISBN:9789147093311 LIBRIS-ID:11617792

[Library search](#)

Greenspan's basic & clinical endocrinology

Gardner, David G.; Shoback, Dolores M.

New York : McGraw-Hill Medical, 2007 - xiv, 1010 s.

ISBN:0-07-144011-9 (ISBN 10) LIBRIS-ID:10577774

[Library search](#)

Werner (red.), Sigbritt

Endokrinologi

2. uppl. : Liber, 2007 - 456 s.

ISBN:91-47-08428-6 (inb.) LIBRIS-ID:10521230

[Library search](#)