

Emergency Surgery in Human Organ Systems

Code: 103599
ECTS Credits: 3

Degree	Type	Year	Semester
2502442 Medicine	OT	6	0

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Prerequisites

It will have to have passed the subjects of "Bases de la Cirurgia", "MIC I", "MIC II", "MIC III" i "MIC IV".

Objectives and Contextualisation

The teaching of surgical pathology in systems in medical and surgical studies can be define as the set of activities intended to provide students with a level of competence in this area.

This competence has to be adequate for the recent graduated as well as a solid base for later acquiring in the future the competences proper to a surgical speciality.

It is important to understand this optional subject, which has a transversal sense with other areas of urgent pathology. For this reason, the orientation of the teaching plan is very important. The syndromic vision of this pathology will be fundamental in order to orienting the diagnosis and the therapeutic strategies from the majority of the clinical situations.

The objectives of the student's training will be to acquire and reinforce the theoretical knowledge and skills necessary to identify the main problems produced by emergency surgical situations in all parts of the human body. It will also be necessary to acquire the expertise in the analysis of bibliographical sources related to each of the subjects, to develop the effort of personal self-apprenticeship and the appropriate attitude in their relationship with patients

Competences

- Be able to work in an international context.
- Convey knowledge and techniques to professionals working in other fields.
- Demonstrate an understanding of the fundamentals of action, indications, efficacy and benefit-risk ratio of therapeutic interventions based on the available scientific evidence.
- Demonstrate understanding of the causal agents and the risk factors that determine states of health and the progression of illnesses.
- Demonstrate understanding of the importance and the limitations of scientific thought to the study, prevention and management of diseases.
- Demonstrate understanding of the manifestations of the illness in the structure and function of the human body.

- Engage in professional practice with respect for patients' autonomy, beliefs and culture, and for other healthcare professionals, showing an aptitude for teamwork.
- Establish a diagnostic approach and a well thought-out strategy for action, taking account of the results of the anamnesis and the physical examination, and the results of the appropriate complementary tests carried out subsequently.
- Establish the diagnosis, prognosis and treatment, basing decisions on the best possible evidence and a multidisciplinary approach focusing on the patient's needs and involving all members of the healthcare team, as well as the family and social environment.
- Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- Indicate the most suitable treatment for the most prevalent acute and chronic processes, and for the terminally ill.
- Listen carefully, obtain and synthesise relevant information on patients' problems, and understand this information.
- Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
- Maintain and use patient records for further study, ensuring the confidentiality of the data.
- Obtain and prepare a patient record that contains all important information and is structured and patient-centred, taking into account all age and gender groups and cultural, social and ethnic factors.
- Perform a general and a system-by-system physical examination appropriate to the patient's age and sex, in complete and systematic way, and a mental evaluation.
- Put forward suitable preventive measures for each clinical situation.
- Recognise and take action in life-threatening situations and others that require an immediate response.
- Recognise the role of complexity, uncertainty and probability in decision-making in medical practice.
- Recognize one's role in multi-professional teams, assuming leadership where appropriate, both for healthcare provision and for promoting health.
- Use information and communication technologies in professional practice.
- Write patient records and other medical documents that can be understood by third parties.

Learning Outcomes

1. Acknowledge the importance of research to medical progress.
2. Approach the physical examination not only from the diagnostic perspective, but also the therapeutic perspective, with special emphasis on surgical procedures.
3. Back decision-making with the best scientific evidence.
4. Be able to work in an international context.
5. Build diagnostic and therapeutic algorithms based on the best scientific evidence, taking into account the facilities available.
6. Calculate the surgical risk indices, both general and by apparatus, and adjust the indications accordingly.
7. Categorise emergency situations in accordance with the available indices of seriousness.
8. Choose a therapy option in accordance with available information and patient preference.
9. Convey knowledge and techniques to professionals working in other fields.
10. Critique original or review scientific papers.
11. Describe the mechanisms of action of physical and chemical agents on the organism.
12. Distinguish the bases of the different surgical specialisations to integrate and lead the treatment in acute and chronic patients with multiple conditions.
13. Enumerate the alarm signs that require urgent attention to the patient.
14. Estimate the risks and benefits of the various therapy options.
15. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
16. Further investigate the risk factors of morbidity and mortality in operations.
17. Gather information and select the most important facts about the patient, both in normal visits and emergencies.
18. Identify all prophylactic measures to reduce indices of morbidity and mortality to the minimum.
19. Identify emergency situations and establish an order of priorities.
20. Identify the ethical bases for decision-making in the field of surgery.
21. Identify the legal bases for creating, maintaining and using databases that contain medical information.

22. Integrate all pre-operative information for decision-making.
23. Justify decisions taken based on the information obtained.
24. Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
25. Make a critical analysis of the objectives to be achieved with surgery, contrasting this with the adverse effects that may be involved.
26. Obtain the most important data, both on the illness being treated and on factors influencing morbidity and mortality.
27. Participate in the whole process of patient-care, from diagnosis to aftercare.
28. Perform the initial assessment automatically and acknowledge the actions that require an immediate response.
29. Provide clear, comprehensible information on the therapy options to patients and their families.
30. Recognise when a patient is in the terminal phase and avoid therapeutic obstination.
31. Transmit information clearly and accurately, leaving no room for possible misunderstandings.
32. Transmit the information on the surgical procedure to be performed and draw up a document of informed consent.
33. Use information and communication technologies in professional practice.
34. Use the scales that assess the general (physical and mental) state of the patient.
35. Use the specific bibliographic sources that will help to develop further one's knowledge.

Content

Theory

Lesson 1: Vascular Emergencies

Lesson 2: Neurosurgery Emergencies

Lesson 3: Ophthalmologic Emergencies

Lesson 4: ORL Emergencies

Lesson 5: Digestive Emergencies I (Esophagogastric)

Lesson 6: Digestive Emergencies II (Intestinal and Proctologic)

Lesson 7: Digestive Emergencies III (Bilious pancreatiqués)

Lesson 8: Urologic Emergencies

Lesson 9: Gynaecological Emergencies

Lesson 10: Legal Medical Implications for Apparel Surgical Emergencies

Clinical Case Seminars

SCC1 Vascular-Neurosurgery

SCC2 Urological/Gynaecological

SCC3 ORL/ Ophthalmological

SCC4: Digestive I

SCC5: Digestive II

Methodology

This guide describes the context, contents, methodology and general rules of the subject, in accordance with the current study plan. The name and measurement of groups, distribution in the calendar and dates of examinations, specific criteria for assessment and review of examinations, will be specify by each of the teaching hospital units, which will be explained through their web pages and the first day of class of each subject, through the professor responsible for the subject of the UDDHH.

In the present course, the professors designated by the departments as responsible for the subject of the Faculty and the UDDHH are:

General teaching methodology

Directed teaching typologies: (20% Theory and clinical case seminars)

Theory (Type TE), one- hour 10 lessons

Seminars (Type SEM), one-hour 5 sessions

Supervised teaching typologies: (20-25% Virtual lessons, and tutorials)

Virtual Lessons:

Teaching given without presence in the classroom under personalized supervision of the student using TIC's

Tutorials:

Tutorials will not count as attending hours; they should to be schedule. The student always, must to be notice of the schedule. They will count as supervised activities. One tutorial per student.

Autonomous work: (50-55%):

Comprehensive reading of texts and articles, study and realisation of summarised sketches and conceptual assimilation of contents. Preparation of presentations and deliveries

Evaluation (5%)

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Clinical case seminars (SCC)	5	0.2	25, 9, 13, 15, 19, 23, 4
Contents given as oral lectures (Theory)	10	0.4	3, 6, 7, 12, 34, 2, 14, 18, 28
Type: Supervised			
Virtual classes (VIRT)	18	0.72	16, 11, 15, 18, 4
Type: Autonomous			
Self-study and reading articles/reports of interest	38.25	1.53	5, 34, 2, 15, 4, 31, 35

Assessment

It will be continuously, by questions and suppositions in each of the sessions from the teaching staff, in such a way that the student shows that he or she has acquired the results of learning associated with the subject both

in theoretical knowledge and in practice, as well as the development of clinical history, diagnosis, and therapeutic strategies based on the best scientific information. The ability to establish multidisciplinary medical relationships in the patient's environment, as well as a good ability to transmit this information orally and in writing, will be valued through work and presentation of the material at the end of the course.

Students, who do not take the assessment tests, both theoretical and practical, will be considered as non-assessed, exhausting the rights to the subject's enrolment.

Students who do not pass the content of the course will have a make-up test in a format to be determined.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Attendance in class and seminars	40%	0	0	3, 7, 12, 25, 8, 34, 2, 13, 15, 21, 20, 19, 23, 24, 26, 29, 27, 28, 30, 17, 31, 32, 1
Multiple choice questions (40%) At the end of the each session	40%	2	0.08	16, 7, 25, 2, 13, 14, 19, 23, 29, 28, 30, 31, 32
Narrative records	20%	1.75	0.07	16, 3, 6, 7, 5, 10, 11, 12, 25, 8, 34, 2, 9, 13, 14, 15, 21, 20, 19, 18, 22, 23, 24, 26, 29, 27, 28, 30, 17, 4, 31, 32, 35, 33, 1

Bibliography

- Schwartz's Principles of Surgery . FC. Brunicardi. 10 Ed. McGrawHill Medical
- ACS Surgery. Principles and practice . Ed BC. Decker , INC (english ed. 2007) or Continuing Medical Communication SL (Ed espanyola 2010).
- Protocols i guies terapèutiques d'urgències en general i en particular per aparells.
- Sabiston. Tratado de cirugía. Fundamentos biológicos de la práctica quirúrgica moderna. Ed. Elsevier 2009.