

Academic Year/course: 2022/23

68413 - Oncological surgery

Syllabus Information

Academic Year: 2022/23

Subject: 68413 - Oncological surgery

Faculty / School: 104 - Facultad de Medicina

Degree: 530 - Master's in Introduction to Medical Research

ECTS: 5.0

Year: 1

Semester: Second semester

Subject Type: Optional

Module:

1. General information

1.1. Aims of the course

This course aims to deep into the principles and foundations of Oncological Surgery, with a vision of the surgical specialist, that is, Onco-surgery.

Oncological surgery will be seen from 5 different approaches:

1-Diagnostic surgery: refers to obtaining biopsies through invasive procedures.

2-Emergency surgery: treats those complications generated by the tumor that put the patient's life at risk in the short term (i.e. intestinal obstruction, viscera perforation, hemorrhage, respiratory obstruction...).

3-Representative surgery: properly refers to the removal of the tumor and/or its metastases with oncological criteria (i.e. healthy tissue margin, lymphadenectomy, respecting the capsular integrity of the tumor, removing the organ or tumor from its vascular origin...) in order to offer oncological benefits (i.e. increase in the disease-free period and increase in overall survival).

4-Palliative surgery: surgery in which the tumor is removed or the complications generated by it are resolved, but generally without real benefit in patient survival (i.e. resecting a bleeding tumor, performing a stoma to treat an intestinal obstruction, performing a tracheostomy... .)

5-Reconstructive surgery: a large part of the oncological resections require reconstruction with tissues or prostheses, some of these can be performed by the Surgeon Oncologist and in others the support of plastic surgeons is required, for example. (e.g. breast reconstruction after a mastectomy).

Taking into account that clinical oncology research constitutes one of the preferential lines in medical research, the main objective of the subject would be: "To establish and develop the bases of surgical oncology, insufficiently considered in the Bachelor's / Master's degree study plan of Medicine, allowing the student at the end of it, to understand, plan and develop clinical and research studies directly or indirectly related to oncological surgery.?"

Specific objectives:

- Know the principles and fundamentals of Oncological Surgery
- Understand the place that Oncological Surgery occupies in the general context of the analysis of results, and its inclusion in the approach of Clinical Trials.
- Apply the new criteria in tumor staging and its application of protocols and clinical practice guidelines and the criteria for possible inclusion in clinical trials, all in the context of the Hospital Tumor Commission.
- Design clinical research projects in Oncological Surgery.
- Know and apply the knowledge and evidence in sentinel lymph node surgery, neoadjuvant QT, extended surgery, prophylactic surgery, early diagnosis and minimally invasive surgery, palliative surgery, metastasis surgery.
- To base oncological breast surgery in the face of: non-palpable breast lesions; early diagnosis, carcinoma in situ, axilla (-), surgery after neoadjuvant chemotherapy, prophylactic surgery, oncoplastic surgery Know the diagnostic and therapeutic offer of minimally invasive image-guided surgery (CMIGI) in oncology.
- Know and discuss the indications and contraindications of these techniques: clinical benefit and therapeutic impact on cancer patients.
- Current state of research in surgical oncology in different cancers: Colon, breast, lung, liver, stomach, pancreas...
- Aspects to investigate in surgical oncology

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>), in such a way that the acquisition of the results of learning of the subject provides training and competence to contribute to a certain extent to its achievement of Objective 3 (Goal 3.B Support for R&D of vaccines and medicines and Goal 3.D Reinforcement in the management of health risks and) and the Goal 4 (Goal 4.7 Promote Global Education for Sustainable Development).

1.2. Context and importance of this course in the degree

Allow the student, at the end of it, to understand, plan and develop clinical and research studies directly or indirectly related to surgical oncology and its different areas of specialization:

- Colon and rectal tumors.
- chest tumors urological tumors.
- Head and neck tumors.
- skin tumors
- Gynecological tumors.
- Gastrointestinal tumors, liver and pancreas.
- Sarcomas and soft tissue tumors.
- Breast tumors.

1.3. Recommendations to take this course

This is an optional subject of the second semester of the Master, which aims to introduce the student in the critical analysis of what represents in clinical and research, the principles and foundations of surgical oncology and oncological surgery, in the field of therapeutics of cancer in general and of breast cancer in particular.

It would be of special interest for students involved in surgical and / or oncological medical specialties

2. Learning goals

2.1. Competences

By passing the subject, the student will be more competent to ...

1. To propose oncological surgical treatments consistent with: the staging and prognostic factors and with adequacy to the specific and protocolized care resources.
2. To analyze correctly and with critical sense the methodology, results and conclusions of the Clinical Trials in Oncologic Surgery.
3. Critically analyze the methodology and results of publications in relation to Oncologic Surgery.
4. Understand, justify and propose guidelines, methods protocols for early diagnosis and screening of certain tumors.
5. To base a research project on Surgical Oncology

2.2. Learning goals

The student, to overcome this subject, must demonstrate the following results ...

Be able to unequivocally understand the fundamentals of oncologic surgery in the general context of cancer research and therapeutics.

To justify the proposition and / or choice of different surgical options in the design of therapeutic protocols in Oncology.

Carry out a critical analysis of the place that surgical oncology would occupy in the design and results of Clinical Trials in Oncology.

To analyze the options proposed in clinical research for minimally invasive image guided surgery in surgical oncology.

To analyze the options proposed in clinical research for minimally invasive image guided surgery in surgical oncology.

2.3. Importance of learning goals

It allows to know and to base in a scientific and rational way, the principles of the Surgical Oncology, insufficiently developed in previous Studies of Degree / Degree, as a fundamental variable in clinical research in Oncology, and that usually is contemplated and weighted unconvincingly in: the adjuvant therapeutic protocolization, the analysis of the results and in the proposal of clinical trials and other epidemiologic methods in clinical research.

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3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that he has achieved the expected learning outcomes through the following assessment activities

Participation: It will be related to the degree of attendance, involvement and participation in the discussions and discussions addressed in class. WEIGHTING: Participation / Involvement (Non-attendance: 0; Non-justified attendance: 5; Assistance: 10): 30%.

Directed work: Critical analysis of an Article in relation to research in Surgical Oncology and / or Oncological Surgery, published in the last year in a Surgical or oncological Journal of relevance, in which the following aspects will be evaluated: Reference of the article, identification of the type of study, analysis of results and final critical analysis. Presentation in symposium. WEIGHTING: 30% (20% + 10%)

Objective final test: Test of 20 multiple-choice questions with 4 answers and one valid answer in relation to conceptual theoretical issues or clinical cases of surgical oncology in relation to the Program and contents of the Subject, without penalty of incorrect answers. It could also consider an objective model of online evaluation, according to the planned schedule. The last day of class of the Subject will take place, in the schedule of the last class. WEIGHTING: 40%

Evaluation Grading System

EVALUATION: Participation / Involvement (No attendance: 0; No justified attendance: 5; Attendance: 10): 30%. Work: 20% + 10%. Exam 40%.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The learning process that has been designed for this subject is based on the following:

The subject has a fundamentally practical orientation, so that the teaching and learning activities that are proposed focus on:

1. The application of a series of fundamental principles of oncological surgery and surgical oncology, in practice and current clinical protocols within the Hospital Tumor Committees in the field of clinical practice, protocolization and / or clinical research .
2. The application of criteria and research models, mainly clinical in the field of Surgical Oncology

4.2. Learning tasks

The program offered to the student to help him achieve the expected results includes the following activities ...

- Theory and practice sessions: Each topic of the syllabus will be presented, analyzed and discussed by the teacher for 50 minutes:
 - Formal and structured presentation of the state of the question: 10 minutes.
 - Presentation of a specialized scientific article or newspaper or protocol: 10 minutes.
 - Group discussion: 20 minutes
 - Conclusions: 10 minutes
- Guided assignment: Each student must prepare and present before the day of the final evaluation, a supervised work with an extension of 4-6 pages, in PDF format. It should be related to a scientific article about cancer surgery or surgical oncology, including minimally invasive surgery image-guided and include a critical analysis of the following points: objectives, general methodology, analysis of results and personal evaluation. Analysis of results and personal assessment.

Critical Symposium: Preview and discussion of the Work Projects in progress.

4.3. Programa

The course includes the following learning tasks:

- Theory and practice sessions: Each topic of the syllabus will be presented, analyzed and discussed by the teacher for 55 minutes:
 - Formal and structured presentation of the state of the question: 15 minutes.
 - Presentation of a specialized scientific article or newspaper or protocol: 10 minutes.
 - Group discussion: 20 minutes
 - Conclusions: 10 minutes
- Guided assignment: Each student must prepare and present before the day of the final evaluation, a supervised work with an extension of 4-6 pages, in PDF format. It should be related to a scientific article about cancer surgery or surgical oncology, including minimally invasive surgery image-guided and include a critical analysis of the following points: objectives, general methodology, analysis of results and personal evaluation.

4.3. Syllabus

1. Basics of Surgical Oncology
2. The Multidisciplinary Team
3. Extra-abdominal Surgical Oncology
4. Abdominal Surgical Oncology
5. Current status of research in Surgical Oncology. Featured Research Centers.
6. Research Proposal. How to develop a scientific project in Oncological Surgery.
7. Role of Surgery in the latest advances in Cancer patient management.

4.4. Course planning and calendar

Coordinator of the Course Dr. José Manuel Ramírez Rodríguez < jramirez@unizar.es >

Calendar: Thursday: March 9, 16, 23, 30 and April 13, 20, 27, 2023

Distribution of face-to-face sessions and classes: Building B: Classroom 4: 4:00 p.m. ? 6:30 p.m.

March 9: PRESENTATION: Of the Subject, of the objectives contained in the Teaching Guide, teaching methodology, how and by whom the classes will be taught, specific calendar of classes, topics and teachers, evaluation criteria, attendance control, aspects of possible online or streaming applications, completion of work, presentation and discussion of work. Topic 1. Basis of Surgical Oncology

March 16: Topic 2. The Multidisciplinary Team

March 23: Topic 3. Extra-abdominal Surgical Oncology

March 30: Topic 4. Abdominal Surgical Oncology

April 13: Item 5. Current status of research in Surgical Oncology. Featured Research Centers.

April 20: Topic 6. Research Proposal. How to develop a scientific project in Oncological Surgery and Topic 7. Role of Surgery in the latest advances in the Management of oncological patients.

27 April: TEST

4.5. Bibliography and recommended resources

- Volume-Outcome Relationship in Oncological Surgery. Montorsi, M. 1ª Edición Octubre 2020. ISBN 9783030518059. Editorial SPRINGER
- Tratamiento del Cáncer. Oncología Médica, Quirúrgica y Radioterapia. Granados, M. Arrieta, Ó. Hinojosa, J. 2ª Edición Agosto 2020. ISBN 9786074488340. Editorial MANUAL MODERNO
- Surgical Oncology for the General Surgeon. An Issue of Surgical Clinics. Zuckerman, R. Wilkinson, N. 1ª Edición Mayo 2020. ISBN 9780323710701. Editorial ELSEVIER
- Surgical Oncology - Journal - Elsevier <https://www.journals.elsevier.com/surgical-oncology>
- Surgical Oncology Clinics of North America - Journal ? Elsevier <https://www.journals.elsevier.com/surgical-oncology-clinics-of-no>
- PUB MED <https://www.ncbi.nlm.nih.gov/pubmed/>
- EMBASE <https://www.embase.com/login>
- COCHRANNE www.cochranlibrary.com/