

26717 - Diagnostic and Therapeutic Procedures: Anatomical-Pathological

Información del Plan Docente

Academic Year	2016/17
Academic center	104 - Facultad de Medicina
Degree	304 - Degree in Medicine
ECTS	6.0
Course	3
Period	First semester
Subject Type	Compulsory
Module	---

1.Basic info

1.1.Recommendations to take this course

1.2.Activities and key dates for the course

2.Initiation

2.1.Learning outcomes that define the subject

2.2.Introduction

3.Context and competences

3.1.Goals

3.2.Context and meaning of the subject in the degree

3.3.Competences

3.4.Importance of learning outcomes

4.Evaluation

5.Activities and resources

5.1.General methodological presentation

5.2.Learning activities

5.3.Program

The offered program designed to help students to achieve expected results,

includes the following activities:

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THEORETICAL PROGRAM:

A) GENERAL PATHOLOGY

1. Introduction and rules of the course

2. Cellular Pathology. Necrobiosis. Necrosis.

3. Lipid metabolism disorders, protein, calcium and uric acid. Pigment deposition disorders

4. Circulatory disorders: hyperemia, hemorrhage, edema, thrombosis, embolism,

Heart attack.

5. Acute and Chronic inflammation. Granulomatous inflammation. Reparative growth:

Regeneration and healing. Infectious disease.

6. Immunopathology. Immunodeficiency. Autoimmune diseases. Immuno-Pathology

related with transplantation. Transplant rejection. Graft-Versus Host Disease (GVHD).

7. Abnormalities of fetal and adult development. Growth disorders, cell differentiation and adaptive cellular changes: regeneration, hypertrophy, hyperplasia, metaplasia and dysplasia. Pre-malignant lesions. Intraepithelial neoplasia. Characteristics of neoplastic cells.

8. Neoplastic Growth: spread, invasion and metastasis. Grade and staging. Pathogenesis and carcinogenesis.

9. Benign Epithelial Neoplasms.

10. Epithelial Malignancies

11. Mesenchymal Neoplasms.

12. Genetic Pathology. Genetic-Molecular onco-pathology. Therapeutic targets.

B) SPECIAL PATHOLOGY ORGANS, APPARATUS AND

SYSTEMS:

1. Cardiovascular Pathology. Endocarditis. IHD. Pericarditis. Cardiomyopathies. Arteriosclerosis. Arteriolosclerosis. Aneurysms. Vasculitis. Hypertension.

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2. Pathology of the respiratory system. COPD, Bronchitis, Emphysema, Bronchiectasia, Atelectasis, Pneumonia, bronchopneumonia, restrictive lung diseases. Neoplasias, malignant pleural pathology.

3. Gastrointestinal disorders. Esophageal reflux esophagitis reactive and Barrett's esophagus. Stomach: gastropathy associated with HP: gastritis, atrophy, intestinal metaplasia, adenocarcinoma and MALT lymphoma.

Small intestine: Celiac disease. Inflammatory bowel disease. Thickening: polyps, polyposis and colorectal carcinoma. Pancreas: pancreatitis, exo and endocrine neoplasia.

Liver: hepatitis, cirrhosis and neoplasms. Biliares.

4. Pathology of the nervous system. inflammatory disease, degenerative and neoplastic CNS and periférico.

5. Skin diseases: Injuries melánicas.

6. endocrine pathology. Neoplasms pituitary, thyroid, parathyroid and adrenal. Thyroid hyper- and hypothyroidism, thyroiditis, goitre and Hiperplasia.

7. lymph node pathology. Lymphadenitis / lymphadenopathy. Metastasis. Nodalesy extranodal lymphomas. Hodgkin's and non-Hodgkin's lymphoma. hematological malignancies primary bone marrow. Leukemias. Mieloproliferativos.

8 Syndromes. renal disease: glomerulonephritis, pyelonephritis. renal neoplasms. urologic pathology. Bladder urothelial carcinoma. Prostate nodular hyperplasia and carcinoma. Testis: infertility, neoplasias.

9. Obstetric Pathology: Abortion. Ectopic pregnancy. Disorders, infections and neoplasms Placenta and Cord. Maternal-fetal. Vascular disorders gestational trophoblastic disease.

Gynecological pathology: Utero: alterations of the endometrium, myometrium and endocervix: benign and malignant: Cervical cancer. Ovarian cysts and solid tumors. Vulva: inflammatory and neoplastic diseases. Vagina infections and malignancies.

Breast: EQF, fibroadenoma and cáncer.

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10. Bone Pathology: Fractures and repair. Osteonecrosis. Pseudotumoral tumors and lesions.

Joint disease: arthrosis and arthritis. pseudotumoral and cystic lesions. Synovitis and tenosynovitis

PRACTICAL PROGRAM

A) macro-microscopic laboratory practices: General Pathology Program gross and microscopic lesions.

Practice 1. Metabolism and pigment deposits, calcium and uric acid.

Practice 2. Circulatory disorders and tissue necrosis.

Practice 3. Inflammation, regeneration and healing. TBC. Immunopathology.

Practice 4. Alterations of cell growth and differentiation. benign and malignant neoplasms.

Practice 5. epithelial and mesenchymal neoplasms. and melanicas vascular neoplasms.

Practice 6. Pathology practice Cardiovascular System

Practice 7. Pathology of the Respiratory System

Practice 8. Digestive Pathology

Practice 9. Pathology of the Nervous System

Practice 10. Pathology of the Endocrine System

Practice 11. Lymphatic System

Practice 12. Pathology of the Nefro-Urologic and Male Genital Apparatus

Practice 13. Pathology of the Gynecological System

B) Supervised Work

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In the macro-microscopic rooms (1 and 2 of Pathology), Faculty practices, students will work with a notebook in which they will draw lesions observed microscopically and the teacher will monitor throughout classes practical course.

There is a notebook of practices of the subject that is available in reprographics, but not required and could be used to buy any other

C) Practice of hospital surgical pathology: Consist attend, a day on the course, the Department of Pathology of the University Hospital "Lozano Blesa" in order to know the procedure of handling biopsies and surgical specimens received in the service. Subsequently, students will learn through microscopic study assisted by camcorder, histopathologic aspects of a representative selection of some of the pieces that saw study, carve and sample macroscopically.

This approach to knowledge of processes and procedures of the Department of Pathology, is not directly subject of the practical test, but it is a tool that contributes to the overall formation of the student in Pathology.

SEMINAR PROGRAMME: It consists of a seminar by each of the following organs and systems:

1. Cardiovascular
2. Respiratory
3. Digestive
4. Nervous System
5. Liver
6. Endocrine
7. Lymphatic and Hematopoietic
8. Nefro-Urologic and Male Genital
9. Gynecologic
10. Bone-Articular

TUTORING: Students can discuss issues related to the study of the subject, in person, by appointment with Professor directly or via e-mail

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5.4.Planning and scheduling

5.5.Bibliography and recommended resources

- http://www.unizar.es/departamentos/anatomia_patologica
- <http://wzar.unizar.es/acad/patologia/>
- <http://www.uv.es/patologia> (www.uv.es/anatpat)

WebPath: www-medlib.med.utah.edu

<http://library.med.utah.edu/WebPath/webpath.html>

Pathweb: <http://pathweb.uche.edu>

<http://www.uscap.org>

<http://path.upmc.edu/cases.html>

<http://www.path.uiowa.edu/virtualslidebox>

- Stevens, Alan. Anatomía patológica / Alan Stevens, James Lowe . - 2ª ed. Madrid : Harcourt, 2001
- Manual de prácticas de anatomía patológica especial : prácticas de patología macro-microscópicas / S. Ramón y Cajal ... [et al.] Zaragoza : Universidad de Zaragoza, Facultad de Medicina [2008]
- Sandritter, W.. Macropatología : manual y atlas para médicos y estudiantes / por W. Sandritter y C. Thomas ; versión española de la cuarta edición alemana ampliada y renovada [por Rafael Echevarría Ramos] ; [revisada por Diego Ribas Mujal] Barcelona [etc.] : Reverté, D.L. 1981
- Anatomía patológica : preparaciones histopatológicas virtuales [Recurso electrónico] / Javier Ortego Fernández de Retana... [et al.] [Zaragoza] : Prensas Universitarias de Zaragoza, 2011
- Kumar, Vinay. Patología humana / Vinay Kumar, Abul K. Abbas, Jon C. Aster ; ilustración, James A. Perkins. - 9ª ed. Ámsterdam ; Barcelona ; Madrid [etc.] : Elsevier, cop. 2013
- Kumar, Vinay. Patología estructural y funcional / Vinay Kumar, Abul K. Abbas, Jon C. Aster ; con ilustraciones de James A. Perkins ; [revisión científica, Félix Manzarbeitia Arambarri, Mª J. Fernández-Aceñero]. - 9ª ed. Ámsterdam ; Barcelona ; Madrid [etc.] : Elsevier, D.L. 2015
- Manual de Prácticas de anatomía patológica: Patología macro y microscópica, Javier Ortego Fernández de Retana y col. Prensas de la Universidad de Zaragoza. ISBN 978-84-16272-04-4, 2014.