SUBJECT TEACHING GUIDE

G141 - Medical Pathology V

Degree in Medicine

Academic year 2015-2016

1. IDENTIFYING DATA

<table>
<thead>
<tr>
<th>Degree</th>
<th>Degree in Medicine</th>
<th>Type and Year</th>
<th>Compulsory. Year 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty</td>
<td>Faculty of Medicine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discipline</td>
<td>Human Clinical Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subject Area: Human Pathology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course unit title and code</td>
<td>G141 - Medical Pathology V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of ECTS credits allocated</td>
<td>6</td>
<td>Term</td>
<td>Semester based (1)</td>
</tr>
<tr>
<td>Web</td>
<td></td>
<td>Mode of delivery</td>
<td>Face-to-face</td>
</tr>
<tr>
<td>Language of instruction</td>
<td>Spanish</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department</td>
<td>DPTO. MEDICINA Y PSIQUIATRIA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name of lecturer</td>
<td>MARIA DEL CARMEN FARIÑAS ALVAREZ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:maria.farinas@unican.es">maria.farinas@unican.es</a></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other lecturers</td>
<td>SANTIAGO ECHEVARRIA VIERNA VICTOR MANUEL MARTINEZ TABOADA</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.1 LEARNING OUTCOMES

- To know how to get a proper medical history, collecting the family and personal history and symptoms of greater diagnostic value.
- To identify by clinical examination the most important data for diagnosis.
- To establish a diagnosis approach based on the data of history and exploration.
- To know what laboratory and imaging tests should be ordered to assess previously established diagnostic possibilities.
- To know how to interpret the results of laboratory tests and imaging requested.
- To know potential patient discomfort and side effects of diagnostic tests requested.
- To know how to establish a diagnostic approach based on the results obtained and propose a therapeutic approach.
- To know the economic cost of diagnostic tests and treatments.
- To know how to proceed correctly in terms of evaluation, exploration and initial treatment of the most common syndromes in Infectious Diseases and Rheumatology.
4. OBJECTIVES
INFECTION DISEASES

LEARNING OBJECTIVES

• To know the clinically relevant biological characteristics of microbial agents causing major Infections Diseases.
• To know how to identify the main signs and symptoms of infectious diseases presenting in both normal and immunocompromised host.
• To understand the pathogenesis and natural history of major bacterial, viral, fungal and parasitic infections.
• To understand the epidemiological importance of the various community Infections.
• To determine the frequency and types of infection complicating the evolution of patients hospitalized for other disease processes and their impact.
• To understand the sensitivity and specificity of the major diagnostic tests, especially at the level of imaging techniques and microbiological analysis, and the opportunity of a request.
• To understand the sensitivity of microorganisms to different antimicrobial agents and their mechanisms of resistance.
• To know the bases of antimicrobial, antifungal and antiviral therapy.
• To know the main therapeutic strategies used in community infections.
• To know the strategies of treatment of nosocomial infections.
• To know the strategies of prevention of Transmitted diseases, including behavioral, prophylaxis and vaccinations.
• To know the prognosis of major infectious diseases, without proper treatment.

ABILITIES

• To know how to obtain an adequate medical history, collecting personal and epidemiological history and clinical data of interest for the diagnosis of infection.
• To identify, by physical examination, the most important data for the diagnosis of possible infection (meningeal syndrome, pulmonary condensation, hepato-splenomegaly, lymphadenopathy, heart murmur, rash, etc.)
• To interpret the hematological and biochemical laboratory abnormalities of interest for the diagnosis and monitoring of an infectious process and when to be ordered.
• To know how to ask the appropriate microbiological tests for the diagnosis of each type of infection (stains, cultures, serology, etc.) and interpret.
• To know how to interpret the basic data of the simple radiological investigations in relation to infectious processes and when to request more sophisticated scans.
• To know to proceed properly, in terms of management and succession of scans, compared to the main syndromes and clinical situations of infectious diseases: acute febrile syndrome, septic shock, prolonged febrile syndrome, meningeal syndrome, pathology of drug addict patient, diarrheal syndrome, pulmonary condensation, severe soft tissue infection, etc.

Rheumatology.

LEARNING OBJECTIVES

• To know the socioeconomic importance of rheumatic diseases and systemic autoimmune diseases.
• To know the structure and function of the joint.
• To know the diagnostic value and clinical utility of laboratory tests used in rheumatology.
• To know the diagnostic value and clinical utility of imaging tests used in rheumatology.
• To understand the most important therapeutic agents used in Rheumatology, their mechanism of action, efficacy, effectiveness, side effects, contraindications and drug interactions.
• To understand the epidemiology, pathogenesis, clinical, analytical, imaging findings, diagnosis, differential diagnosis, prognosis and treatment of rheumatic diseases and systemic autoimmune diseases.
• To understand, in diseases where available, the current international criteria proposed for classification.
• To understand, in diseases where available, the therapeutic regimens proposed by scientific societies of rheumatology excellence. Classification.
• To understand, in diseases where available, the therapeutic regimens proposed by Scientific Societies of Rheumatology.

ABILITIES

• To know how to obtain adequate medical history, collecting the personal, familial and symptoms of greater diagnostic value.
• To know how to identified by clinical examination the most relevant data for diagnosis.
• To establish a diagnostic approach based on the data of history and exploration.
• To know what laboratory tests and imaging should be ordered to assess previously established diagnostic possibilities.
• To know how to interpret the results of laboratory tests and imaging requested.
• To know the potential patient discomfort and side effects of diagnostic tests requested.
• To know how to establish a diagnostic approach based on the results obtained and propose a therapeutic approach.
• To know the economic cost of diagnostic tests and treatments.
• To know how to proceed correctly in terms of evaluation, exploration and initial treatment of the most common syndromes in rheumatology.
<table>
<thead>
<tr>
<th>6. COURSE ORGANIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTENTS</td>
</tr>
</tbody>
</table>
MODULE OF INFECTIOUS DISEASES. THEORY

PART I: INTRODUCTION TO INFECTIOUS DISEASES.
Unit 2. The antibiotic, antifungal and antiviral therapy in infectious diseases

PART II. DISEASES CAUSED BY GRAM-POSITIVE ORGANISMS.
Unit 6. Diseases caused by gram-positive cocci: staphylococcal (Staphylococcus coagulase-negative Staphylococcus aureus.). Epidemiology, clinical manifestations, diagnosis, and treatment.
Unit 7. Diseases caused by gram-positive bacilli Listeria, Corynebacterium, Rhodococcus, Bacillus anthracis and Erysipelothrix. Epidemiology, clinical manifestations, diagnosis, and treatment.

PART III. DISEASES CAUSED BY GRAM-NEGATIVE ORGANISMS

PART IV. OTHER BACTERIAL INFECTIONS

PART V. Disease caused by spirochetes
Unit 15. Diseases caused by Treponema, Leptospira and Borrelia. Epidemiology, pathogenesis, clinical manifestations, diagnosis and treatment.

PART VI. FUNGAL DISEASES

PART VII. DISEASES CAUSED BY RICKETTSIA, MYCOPLASMA AND CHLAMYDIA

PART VII. DISEASES CAUSED BY MYCOBACTERIA
Unit 19. Diseases caused by Mycobacterium tuberculosis, non-tuberculous mycobacteria, Mycobacterium leprae.
Epidemiology, pathogenesis, clinical manifestations and treatment.

PART VIII. DISEASES CAUSED BY PROTOZOA AND HELMINTHS

PART IX. DISEASES CAUSED BY VIRUSES
Unit 23. HIV infection. Opportunistic main processes.
Unit 24. Diseases caused by herpes virus I, II, Cytomegalovirus (CMV), herpes virus VI, VII and Epstein-Barr virus.
Unit 25. Diseases caused by influenza and other respiratory viruses.
Unit 26. Diseases caused by Parvovirus and Human Papillomavirus (HPV).
Unit 27. Infecciones transmitted by insects and animals.

PART X. INFECTIOUS DISEASES: CLINICAL MANIFESTATIONSAL SYNDROMES.
Unit 28. Infecciones in immunocompromised patients
Unit 29. Diseases associated with major Infectious diseases
Unit 30. Intravascular catheter-related infections. Suppurative thrombophlebitis.
Unit 31. Infectious Diseases related to healthcare. Infectious Diseases of the traveler.
MODULE OF RHEUMATOLOGY . THEORY
UNIT 1. Concept of Rheumatology. Joint structure and function
Synovial fluid. Arthrocentesis indications and signs of synovial fluid.
D Hyperimmunoglobulinemia syndrome with periodic fever. PFAPA syndrome.
UNIT 22. Arthritis by infectious agents. II special clinical manifestations at forms: Nesisseria arthritis.
Osteoarticular tuberculosis. Bone infections: Acute osteomyelitis and spondylodiscitis.

### 7. ASSESSMENT METHODS AND CRITERIA

<table>
<thead>
<tr>
<th>Description</th>
<th>Type</th>
<th>Final Eval.</th>
<th>Reassessn</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written exam with short questions and type test questions (multiple choice questions)</td>
<td>Written exam</td>
<td>No</td>
<td>Yes</td>
<td>100,00</td>
</tr>
</tbody>
</table>

**TOTAL**

100,00

**Observations**

- The final qualification of Medical Pathology V will be the result of arithmetic mean of the score obtained in both modules.
- If one module is approved in the ordinary exam, its rating will be saved until the September exam.
- To approve the whole subject is therefore necessary to approve the two modules in a same academic year.

**Observations for part-time students**

### 8. BIBLIOGRAPHY AND TEACHING MATERIALS

**BASIC**

- Harrison Principios de Medicina Interna. 17 ed. en español. McGraw Hill