29319 - Pharmacology

Información del Plan Docente

Academic Year	2016/17
Academic center	229 - Facultad de Ciencias de la Salud y del Deporte
Degree	442 - Degree in Odontology
ECTS	6.0
Course	2
Period	Second semester
Subject Type	Basic Education
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

THEORETICAL PROGRAM

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SECTION 1 : GENERAL PRINCIPLES OF PHARMACOLOGY

Chapter 1. Concept of Pharmacology. Definition and contents. Division of Pharmacology.

Chapter 2. Drug Absorption. Routes of drug administration.

Chapter 3. Drug Distributión.

Chapter 4. Elimination: Drug Metabolism. Drug Excretion.

Chapter 5. Pharmacodynamics.

Chapter 6. Drug Interactions. Interactions of interest in dentistry

Chapter 7. Adverse drug reactions (ADR). Oral side effects of medications. Pharmacovigilance.

SECTION 2: DRUGS ACTING ON AUTONOMIC NERVOUS SYSTEM AND PERIPHERAL NERVOUS SYSTEM

Chapter 8. Cholinergic Transmission. Cholinergic agents (Parasympathomimetics)

Chapter 9. Anticholinergic agents (Antimuscarinic agents). Neuromuscular blocking drugs

Chapter 10. Adrenergic Transmission. Adrenergic Drugs (Sympathomimetics)

Chapter 11. Adrenergic-receptor antagonists block the effects of sympathetic stimulation: Alpha blocker and Beta blockers

SECTION 3: PHARMACOLOGY OF PAIN, INFLAMMATION, IMMUNITY AND ANESTHESIA

Chapter 12. Histamine and Antihistamines

Chapter 13. Nonsteroidal anti-inflammatory drugs

Chapter 14. Steroids antiinflammatory drugs (Corticosteroids)

Chapter 15. Opioid analgesics

Chapter 16. Local anesthetics. Basis of general anesthesia in dentristy.

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SECTION 4: CENTRAL NEUROPHARMACOLOGY

Chapter 17. Drugs used for the treatment of anxiety and sleep disorders

Chapter 18. Drugs used for the treatment of affective disorders

SECTION 5: DRUGS AFFECTING BLOOD

Chapter 19. Drugs affecting hemostasis. Key Points for Dentists

SECTION 6: CARDIOVASCULAR PHARMACOLOGY

Chapter 20. Anti-ischemic drugs; drugs used in the management of heart failure: arterial hypertension. Dental repercussion.

SECTION 7: PHARMACOLOGY OF HORMONES

Chapter 21 : Insulin, glucagon and oral antidiabetic agents. Key Points for Dentists

Chapter 22. Thyroid hormones and antithyroid drugs. Parathyroid Hormone. Calcium. Vitamin D. Calcitonin.

SECTION 8: CHEMOTHERAPEUTIC DRUGS

Chapter 23. Principles of antimicrobial chemotherapy

Chapter 24. Beta-lactam antibiotics. Beta-lactamase inhibitors

Chapter 25. Aminoglycosides

Chapter 26. Macrolides. Ketolides, Lincosamide, Tetracyclines. Chloramphenicol. Other Antibacterial agents

Chapter 27. Antitubercular agents.

Chapter 28. Antifungal agents

Chapter 29. Antiviral agents

PRACTICE PROGRAM

- Workshop:

. Pharmaceutical forms and route of drug administration

. Adverse drug reactions (ADR)

- Computer simulation: Autonomic Nervous System: Dose-response curves. Agonist and antagonist drug (competitive or non-competitive). Neuromuscular blocking drugs

- Problem-bases learning (PBL1, PBL2 and PBL3)

5.4.Planning and scheduling

5.5.Bibliography and recomended resources

BASIC BIBLIOGRAPHY

- FLÓREZ J. Farmacología Humana (5ªed). Barcelona: Elsevier-Masson, 2008

- LORENZO P, MORENO A, LIZASOAIN I, LEZA JC, MORO MA, PORTOLÉS A. Velázquez- Farmacología básica y clínica (18ªed). Madrid: Panamericana, 2009

- RANG HP, DALE MM, RITTER JM, FLOWER RJ. Rang y Dale-Farmacología (6ªed). Barcelona: Elsevier, 2008

RECOMMENDED RESOURCES

- FLÓREZ J. El tratamiento farmacológico del dolor. Madrid. Ars Médica. 2007

- PEÑARROCHA M, SANCHIS JM, MARTÍNEZ JM. Anestesia local en Odontología. Barcelona. Ars Médica. 2007

- TRIPATHI KD, Farmacología en odontología, Fundamentos. (1ª ed). Madrid. Panamericana, 2008.