

## The Hebrew University of Jerusalem

Syllabus

Orafacial Pain - 97762

Last update 27-06-2023

HU Credits: 2

<u>Degree/Cycle:</u> 2nd degree (Master)

Responsible Department: Dental Medicine

Academic year: 0

Semester: 2nd Semester

<u>Teaching Languages:</u> Hebrew

Campus: Ein Karem

Course/Module Coordinator: Dr yaron Haviv

<u>Coordinator Email: yaron.haviv@gmail.com</u>

**Coordinator Office Hours:** Thursday

Teaching Staff:

### Course/Module description:

The course describes the more common acute and chronic orofacial pain conditions. Students are instructed how to collect relevant data and assess the patient, as the basis for diagnosis of these conditions. The conditions are presented and analyzed from the initial clinical presentation, through diagnosis, pathophysiology, treatment and prognosis employing numerous case presentations. Additionally students are able to examine acute and chronic orofacial pain patients during their rotations in the department.

### Course/Module aims:

The course describes common orofacial pain conditions. Students are taught to collect relevant data pertaining to the patient and his pain condition. The student is then expected to organize and analyze the data so as to accurately describe and identify the orofacial pain diagnosis. Finally the student should recommend a suitable mode of therapy and support his choice vis-à-vis other therapeutic options.

<u>Learning outcomes - On successful completion of this module, students should be able to:</u>

Describe the diagnostic process and collect a tailored pain history for acute and chronic orofacial pain patients.

- List the common acute and chronic orofacial pain diagnoses encountered.
- Analyse and discuss the differences between acute and chronic pain patients.
- Describe the signs, symptoms and therapy of acute orofacial pain conditions. In the clinical setting; assess collected data, state a diagnosis and recommend adequate therapeutic modalities for each diagnosis.
- Describe the signs and symptoms, management and prognosis of chronic orofacial pain. In the clinical setting; assess collected data, state a diagnosis, describe and criticize management modalities for each and justify the final choice.
- Describe the families of drugs commonly used in the management of acute and chronic orofacial pain, and enumerate their individual modes of action.
- Formulate treatment protocols using analgesic drugs in common use in dentistry and defend the choice based on efficacy and side-effect profiles of these drugs.
- Describe a normal human sleep cycle and its importance in homeostasis particularly in the nociceptive system.

1.1 1.2 1.3 1.4 1.5 2.2 2.3 2.4 3.2 3.3 3.4 3.5 3.6 4.1 4.2 4.3 4.4 4.5 4.6 4.8 4.9 5.15 6.1 6.2 6.3 6.4 6.5 6.6 6.7 6.8 6.9 6.10 6.11

This course supports the following HUHSDM Professional Practice Competencies: 2.2, 2.3

# Attendance requirements(%): 80%

Teaching arrangement and method of instruction: lectures

### Course/Module Content:

- 1. Lectures 1-2 (4hrs): Introduction to course, Patient Assessment
- Taking a pain patient's history and head and neck examination. Use of pain diaries.
- Classifications of pain in the head, orofacial and cervical regions: American Academy of Orofacial Pain, Diagnostic Criteria for Temporomandibular Disorders, International Headache Society.
- Aims of treatment; chronic versus acute pain.
- Basic mechanisms of pain and inflammation.
- Peripheral and Central Sensitization.
- 2. Lectures 3 (2hrs): The treatment of acute pain with analgesics, NSAIDs and opioids.
- Enumerate the salient modes of action for each drug/drug group.
- Assess and decide which drug is suitable for the specific patient and condition, considering medical and pharmacological issues:
- o Non-steroidal analgesic drugs (NSAIDs, e.g. ibuprofen, naproxen, paracetamol).
- o Differentiate between drugs acting primarily via COX-1 and those via COX-2.
- o Describe the different efficacy and side effect profile of COX1 versus COX-2 drugs.
- o Dipyrone (in common use in Israel- not used in the USA or W. Europe).
- o Opioids (e.g. codeine, oxycodone) and their combinations with NSAIDs.
- o Tramadol.
- Treatment regimens and indications for the different drug classes.
- 3. Lectures 4-5 (4hrs): Acute orofacial pain
- Dentinal pain
- Pulpal pain
- Periapical/periodontal pain
- Mucosal pain
- Rhinosinusitis and dental pain
- 4. Lectures 6-8 (6hrs):
- a. Drug Therapy of chronic orofacial pain
- Know the use of the following drugs in chronic orofacial pain.
- o Antidepressants
- o Tricyclic antidepressants (TCAs)
- o Serotonin and Noradrenaline reuptake inhibitors (SNRIs)

- o Antiepileptic drugs
- b. Musculoskeletal pain (TMDs)
- Pain from the TMJ
- o Disorders arising from internal derangements
- o Disc displacements, osteoarthritis
- · Pain from regional muscles
- o Myospasm
- o Myositis
- o Myofascial pain
- Tension type Headache
- 5. Lectures 9-10 (4hrs): Neurovascular pain
- Common clinical features
- Migraine
- Cluster
- Paroxysmal Hemicrania
- Neurovascular Orofacial Pain
- 6. Lectures 11-12 (4hrs): Neuropathic Orofacial Pain
- Trigeminal Neuralgia
- Glossopharyngeal Neuralgia
- Traumatic Neuropathies
- Burning mouth syndrome
- 7. Lecture 13: Sleep and Pain
- Sleep structure
- o Understanding the relationship between sleep disturbance and pain features (e.g. intensity).
- o Describe relations between specific pain syndromes and/or characteristics and disturbed sleep e.g. Cluster Headache.
- 8. Lecture 14: Summary and Differential Diagnosis
- Case based summary of entities covered

### Required Reading:

Sharav Y, Benoliel R (Eds): 2015, Orofacial Pain & Headache. second edition Quintessence Publishing.

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Diagnostic Criteria for Temporomandibular Disorders (DC/TMD) for Clinical and Research

Schiffman et al, | Oral Facial Pain Headache. 2014

### Additional Reading Material:

Headache Classification Committee of the International Headache Society (IHS) The International Classification of Headache Disorders, 3rd edition

### Cephalalgia . 2018 Jan;38(1):1-211

# Course/Module evaluation: End of year written/oral examination 100 % Presentation 0 % Participation in Tutorials 0 % Project work 0 % Assignments 0 % Reports 0 % Research project 0 % Quizzes 0 % Other 0 %

### Additional information:

none