

BDS Year 4 Regular batch
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Subject: Oral Medicine

Topic: ORO-FACIAL PAIN PART-II

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Definition

(International Association for the Study of Pain:IASP)

- ❖ **An unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage**

CLASSIFICATION

AXIS I (PHYSICAL)

1.SOMATIC PAIN

- ❖ SUPERFICIAL
- ❖ DEEP

2. NEUROPATHIC PAIN

- ❖ EPISODIC
- ❖ CONTINUOUS

AXIS II(PSYCHOLOGICAL)

1. MOOD DISORDER

2. ANXIETY

3. SOMATOFORM DISORDERS

4. OTHER CONDITIONS SUCH AS PSYCHOLOGICAL FACTORS AFFECTING A MEDICAL CONDITION

AXIS I- PHYSICAL- Somatic pain

1. Superficial somatic pain

- a) Cutaneous pain
- b) Mucogingival pain

2. Deep somatic pain

- a) Musculoskeletal pain

Muscle pain

Protective co-contraction

Delay onset muscle soreness

Myofascial pain

Myospasm

Myositis

TMJ pain

Ligamentous pain

Retrodiscal pain

Capsular pain

Arthritic pain

Osseous and periosteal pain

Soft connective tissue pain

Periodontal dental pain

AXIS I- PHYSICAL- Somatic pain

b) Visceral pain

Pulpal dental pain

Vascular pain

Arteritis

Carotidynia

Neurovascular pain

Migraine with aural

Migraine without aura

Cluster headache

Paroxysmal hemicrania

Neurovascular variants

Visceral mucosal pain

Glandular ocular,auricular pain

AXISI- PHYSICAL - Neuropathic pain

1. Episodic neuropathic pain

a) Paroxysmal neuralgia

- a) Trigeminal neuralgia
- b) Glossopharyngeal neuralgia
- c) Geniculate neuralgia
- d) Superior laryngeal neuralgia
- e) Nervous intermedius

b) Neurovascular pain

2. Continuous neuropathic pains

a) Neuritis

- a) Peripheral neuritis
- b) Herpes zoster
- c) Postheraptic neuralgia

b) Deafferentation pain

- a) Neuroma
- b) Atypical odontalgia

c) Sympathetically maintained pain

AXIS II- PSYCHOLOGICAL

1. Mood disorders

- a) Depressive disorders
- b) Bipolar disorders
- c) Mood disorders

2. Anxiety disorders

- a) Generalized anxiety disorders
- b) Posttraumatic stress disorders
- c) Anxiety due to a medical condition

ATYPICAL FACIAL PAIN

(Persistent idiopathic facial pain)

- ❖ “Atypical” means somewhat **unusual**.
- ❖ The International Headache Society describes atypical facial pain as “**a persistent facial pain that does not fulfill criteria for other cranial neuralgias or other commonly described pain syndromes.**”
- ❖ The term “**atypical odontalgia**” - pain is confined to the teeth or gingiva.
- ❖ The term “**atypical facial pain**” is used when other parts of the face are involved
- ❖ Persistent idiopathic facial pain (previously known as atypical facial pain) is characterized by **persistent facial and/or oral pain in the absence of a neurologic deficit.**
- ❖ The symptoms may follow **minor surgery or mild injury to the face, teeth, or gums**, and persist after healing without a clear local cause
- ❖ The pain is commonly felt in the **nasolabial fold or one side of the chin**, but can spread to wider areas of the face and neck.

CLINICAL MANIFESTATIONS

- Constant dull aching pain without an apparent cause
- W > M in the fourth and fifth decades of life
- Onset of pain coincided with a dental procedure
- Seeking multiple dental procedures to treat the pain
- Receiving trials of multiple medications,
- unilateral, cross the midline

Diagnostic criteria for persistent idiopathic facial pain, according to the ICHD-3, require all of the following

- ❖ **Facial and/or oral pain**
- ❖ **Recurring daily** for more than two hours per day for more than three months
- ❖ Pain has both of the following characteristics:
Poorly localized, and not following the **distribution of a peripheral nerve**
- ❖ Dull, aching, or nagging quality
- ❖ **Clinical neurologic** examination is **normal**
- ❖ A dental cause has been excluded by appropriate investigations.

- ❖ For persistent idiopathic facial pain, **tricyclic antidepressants** (eg, amitriptyline) are the preferred treatment.
- ❖ When tricyclic medications are contraindicated or poorly tolerated,
- ❖ Gabapentin or pregabalin are preferred alternative choices.

Burning Mouth Syndrome (Glossodynia)

- ❖ Oral burning that has no detectable cause.
- ❖ BMS do not follow anatomic pathways, there are no mucosal lesions or known neurologic disorders to explain the symptoms, and there are no characteristic laboratory abnormalities.
- ❖ Burning mouth syndrome is characterized by an **intraoral burning sensation** for which no medical or dental cause can be found.
- ❖ Pain may be **restricted to the tongue**, or just the **tip of the tongue**, and may be associated with dysesthesia, **altered taste**, and/or a **sensation of having a dry mouth**.
- ❖ This uncommon condition predominantly affects postmenopausal women, and 30 to 50 percent of patients improve spontaneously.

Etiology

- ❖ A possible etiologic role for psychologic factors such as **anxiety and depression** has been proposed but is unproven
- ❖ The increased incidence of BMS in **women after menopause** has led investigators to suspect an association with **hormonal changes**
- ❖ **salivary gland hypofunction, chronic low-grade trauma** is considered

Clinical features

- ❖ The **tongue** is the most common site of involvement, but the lips and palate are also frequently involved.
- ❖ The burning can be either **intermittent or constant**, but eating, drinking, or placing candy or chewing gum in the mouth characteristically relieves the symptoms.

TREATMENT

- ❖ Elimination of the possibility of detectable lesions or underlying medical disorders
- ❖ Reassurance of the benign nature of the symptoms
- ❖ Drug therapies –
- ❖ Low doses of TCAs, such as amitriptyline and doxepin, or clonazepam (a benzodiazepine derivative).
- ❖ Alpha lipoic acid 600 to 800 mg administered daily in 3-4 doses
- ❖ Parafunctional oral habits may be relieved with the use of a splint covering the teeth and/or the palate.

Vascular Pain

- ❖ Pain originating from vascular structures may cause facial pain
- ❖ That can be misdiagnosed and mistaken for other Oral disorders, including toothache or TMD.

CRANIAL ARTERITIS (temporal arteritis, giant cell arteritis)

- ❖ **An inflammatory disorder involving the medium-sized branches of the carotid arteries.**
- ❖ **Temporal artery**
- ❖ **Etiology and Pathogenesis : immune abnormalities that affect cytokines and T lymphocytes.**

C/f-

- ❖ **Adults above the age of 50 years.**
- ❖ **Throbbing headache accompanied by generalized symptoms (fever, malaise, and loss of appetite)**

- ❖ Thickened pulsating temporal artery
- ❖ Throbbing pain in the jaw or tongue (mandibular and lingual arteries)
- ❖ Complication - ischemia of the eye
- ❖ Elevated ESR and anemia.
- ❖ Abnormal C-reactive protein
- ❖ The most definitive diagnostic test is a biopsy specimen
- ❖ Systemic corticosteroids (initial dose ranges between 40 to 60 mg of prednisone per day)
- ❖ Immunosuppressive drugs cyclophosphamide,

MIGRAINE

- ❖ Most common of the vascular headaches
- ❖ Occasionally also cause pain of the face and jaws.
- ❖ Triggered by foods such as **nuts, chocolate, and red wine; stress; sleep deprivation; or hunger.**
- ❖ common in **women**
- ❖ caused by **vasoconstriction of intracranial vessels followed by vasodilation**

Classic migraine

- ❖ Starts with a prodromal aura
- ❖ Visual aura - flashing lights or a localized area of depressed vision (scotoma) or other neurologic symptoms lasts from 20 to 30 minutes.
- ❖ Unilateral throbbing Headache with nausea & vomiting
- ❖ The patient characteristically lies down in a dark room and tries to fall asleep.
- ❖ Headaches characteristically last for hours up to 2 or 3 days.

Common migraine

- ❖ **not preceded by an aura**
- ❖ experience irritability or other mood changes
- ❖ causes a **throbbing and/or sticking pain in the neck or jaw**
- ❖ involvement of branches of the **carotid artery**
- ❖ 30 to 50 years of age
- ❖ Patients often seek dental consultation, but unlike the pain of a toothache, facial migraine pain is not continuous but lasts minutes to hours

Treatment

- ❖ Attempts to minimize reactions to the stress
- ❖ Drug therapy
 - Ergotamine(2mg sublingually) and **sumatriptan(50-100 mg at onset)**
 - Prevent migraine include propranolol, verapamil, and TCAs.

Tension headache

- ❖ It is characterized by **constant dull aching pain felt bilaterally in the temporal and frontal region**
- ❖ Often described as wearing a tight headband.
- ❖ Anxiety, sleep deprived, stress, Muscle strain, myofascial pain.

Cluster headache (CH)

- ❖ Distinct pain syndrome characterized by episodes of severe unilateral head pain.
- ❖ occurring chiefly around the eye and accompanied by a number of autonomic signs.
- ❖ The term “cluster” is used - multiple headaches per day for 4 to 6 weeks and then may be without pain for months or even years.
- ❖ Male

Eagles syndrome

- ❖ Eagles syndrome is group of disorders due to the mineralization of the **stylohyoid ligament** or elongation of **stylohyoid process**.
- ❖ Causes pain in neck, pain in the angle of the mandible, in the ear, facial pain
- ❖ Pain upon swallowing, throat pain, upon turning head or opening the mouth widely, temporal headache.

Management of eagles syndrome

- ❖ is to diagnose first whether the styloid process is really elongated or not by OPG.
- ❖ Intralesional injections of corticosteroids on the mineralized stylohyoid ligament.
- ❖ If pain still persists than surgical removal of the styloid ligament or process is the line of treatment.

Questions

1. Giant cell arteritis is also called as----
 - a) Cluster headache
 - b) Migrane
 - c) Temporal arteritis
 - d) Any of the above

2. Migrane is a type of

- a) Vascular headache
- b) Neurogenic headache
- c) Somatic headache
- d) Any of the above

3. Patient suffering from Eagle's Syndrome may C/o of:

- a) **Dysphagia**
- b) **Burning sensation in oral cavity**
- c) **Glossodynia**
- d) **Excessive salivation**

4. “Alarm clock headache” is usually used term for:

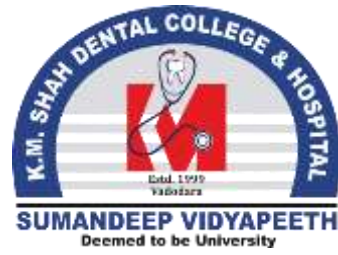
- a) Cluster headache
- b) Tension headache
- c) Migraine
- d) SUNCT Syndrome

5. . Neuralgia which can be associated with Herpes zoster

- a) Post – herpetic neuralgia
- b) Geniculate neuralgia
- c) Trigeminal neuralgia
- d) All of the above

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THANK YOU

