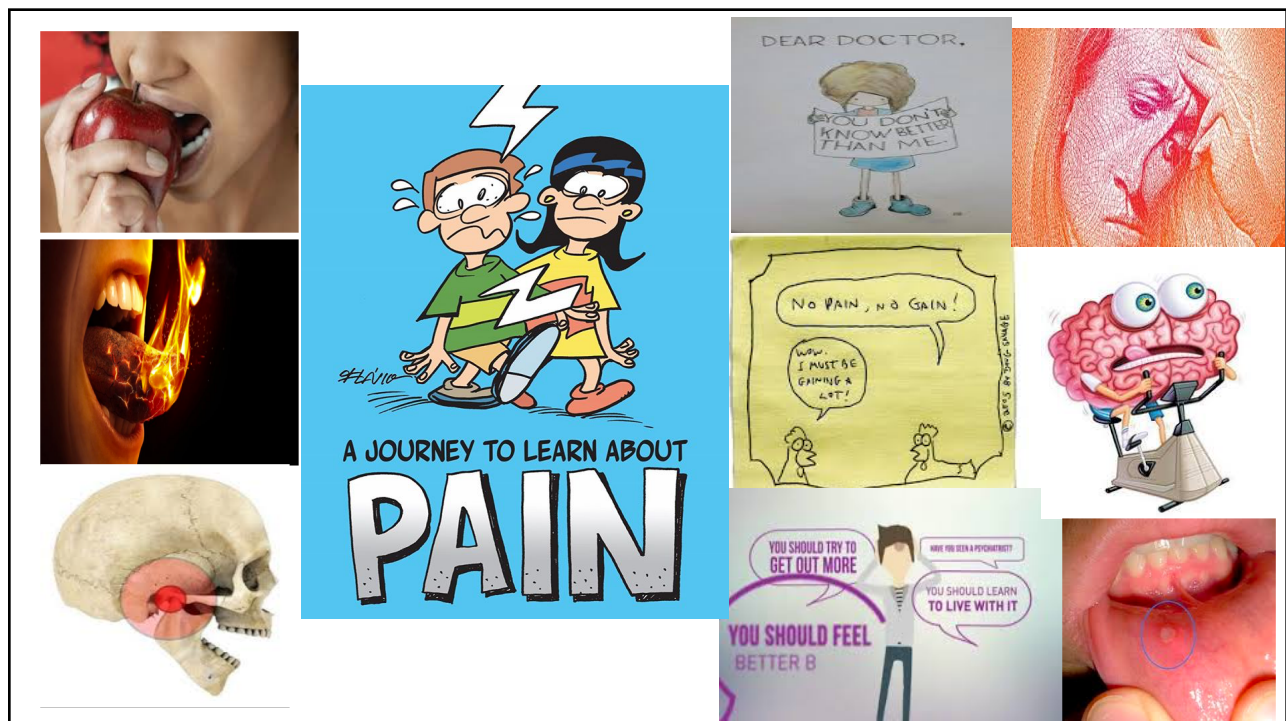


Orofacial Pain

Seema Kurup MDS, MS, FAAOM
Assistant Professor, Section: Oral Medicine
Course Director: Orofacial Pain & TMD
Dept of Oral Health and Diagnostic Sciences
University of Connecticut, School of Dental Medicine



Some Patient Complaints:

- About 2 months after my wisdom teeth were removed, I started noticing popping and clicking in my jaws when I open my mouth wide.
- I have a burning stabbing pain in my tongue that lasts about a minute or less. I used to get this twice or thrice a day but the frequency has increased since a month.
- I am an IT professional and I work at my computer desk for about 6 hours and recently I noticed jaw and neck pain.
- I have a constant stabbing pain around my eyes, cheeks and upper teeth on the right side. Sometimes my right temples hurt as well.
- I had a root canal done but the tooth pain persisted. After seeing many providers and multiple treatments, the tooth was extracted but the pain is still present. All doctors say that there is nothing wrong in my mouth.
- I chew 3-4 gum every day. Never had a problem. But these days I find that my cheeks hurt when I move my jaw.

Dentist's Role in Diagnosing Non-odontogenic Orofacial Pain

- Dentists are often the first clinicians to be consulted for neuropathic pain in the orofacial region
 - Example: Trigeminal Neuralgia
- Dentists are often the first clinicians to be consulted for neurovascular pain in the orofacial region
 - Example: NVOP (Facial migraine)
- Dentists are often the first clinicians to be consulted for musculoskeletal pain in the orofacial region
 - Example: 'TMD'

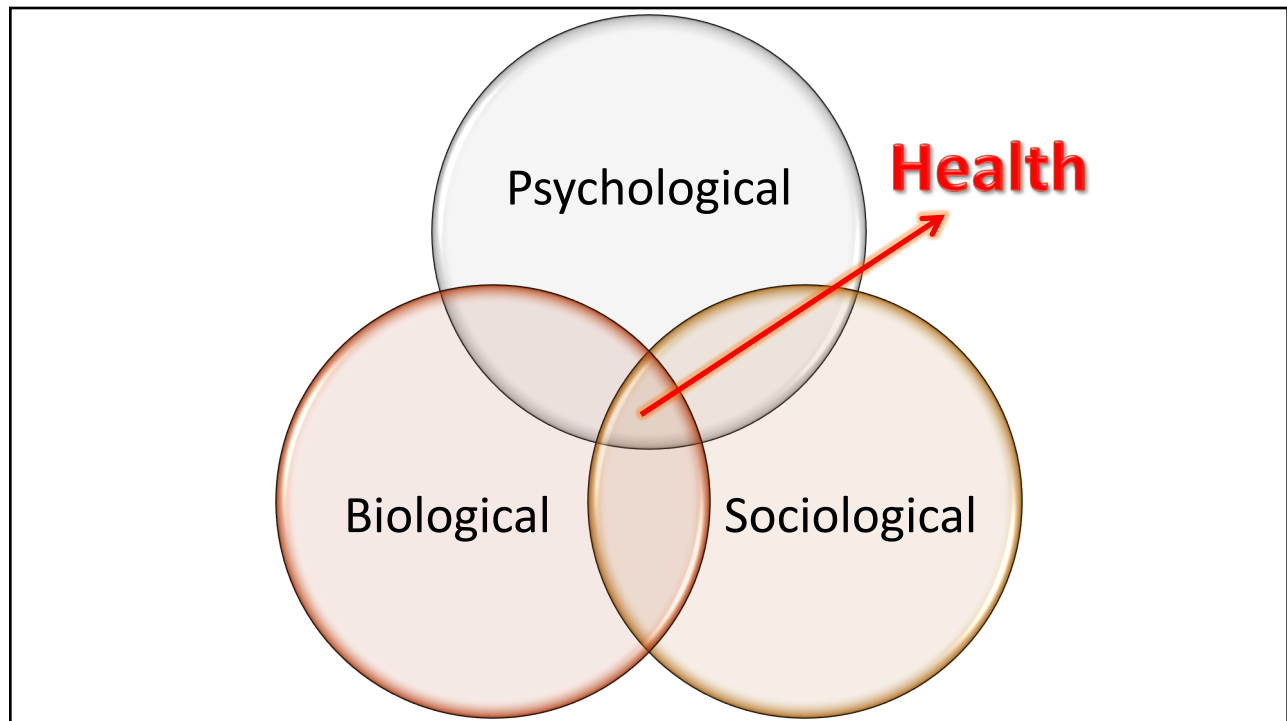
Basic Concepts of Pain

- **Definition**
- **Biopsychosocial model of pain**
- Functional anatomy of the nervous system
- Pain mechanisms (neurophysiology)
- Types of pain
- Terminologies used in pain.

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

Merskey et al (1979)

International Association for the Study of Pain



The Pain patient and listening to the language of pain

- Patients with similar pain conditions may describe pain in very different terms that reflect differences in sex, culture, education or the actual physical experience of pain, in turn influenced by genetic factors.
- Physical dimension by severity or quality
- Emotional dimension : 'unbearable to live with', 'depressing'
- Responses to medications
- Attitudes towards health care
- **Multidimensionality : Experience rather than a sensation**
- Important to get a complete insight into the patient's experience that a patient endures

- Sir William Osler:

“It is more important to know what type of individual has the pain rather than the type of pain the patient has”

- “Different individuals sensing identical noxious stimulation feel pain in different ways and react at different levels of suffering.”

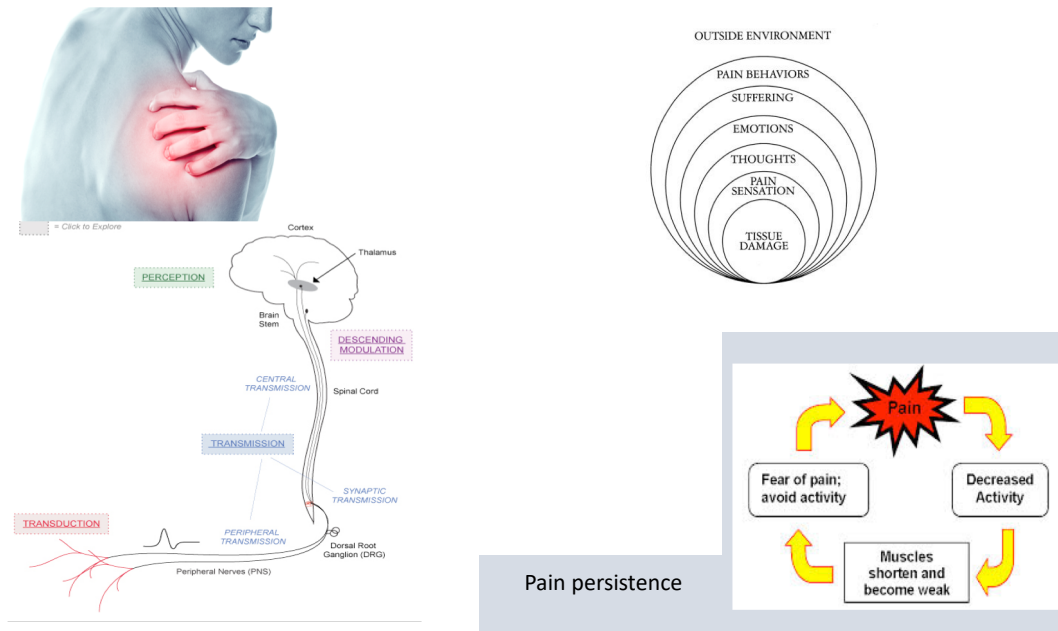
- Okeson, 2005

- **Statistics** from the US indicate that 100 million adults suffer from chronic pain at an estimated annual cost of around \$600 billion- higher than the cost for heart disease, cancer, or diabetes.
- Chronic pain is a world wide epidemic that has been termed ‘ the silent crisis’.
- Orofacial Pain, of which 10% is chronic affects around a quarter of the general population
- 4.6% of populations suffer from painful TMDs (6.3 % women and 2.8% men)
- Persistent facial pain has a reported incidence of 38.7 per 100,00 person-years, is more common in women and increases with age.
- Trigeminal neuralgia and cluster headaches are often heard names.

-Orofacial Pain and headache ,2nd ed; Sharav and Benoliel

Basic Concepts of Pain

- Definition
- Biopsychosocial model of pain
- **Functional anatomy of the nervous system**
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- Types of pain
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Basic Concepts of Pain

- Definition
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- Orofacial Pain Umbrella

- Musculoskeletal
- Neuropathic
- Neurovascular
- Psychogenic

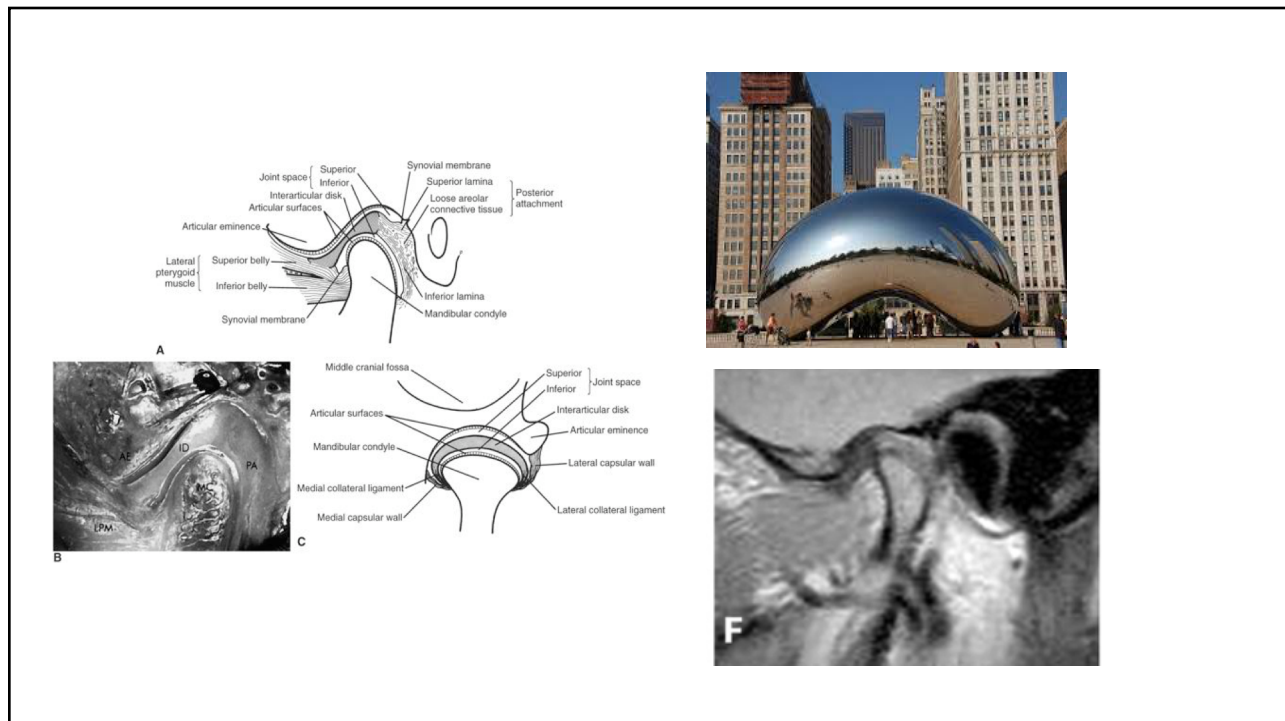
- Sleep


Musculoskeletal – “TM Disorders”

- TM Joint:
 - arthralgia
 - osteoarthritis
 - rheumatoid arthritis
 - internal joint disorders (ADDwR, ADDwoR),
 - hypomobility (adhesions, ankylosis)
 - hypermobility
 - joint pathology
 - developmental disorders (aplasia, hypo/hyperplasia)
- ▣ Muscular:
 - myalgia
 - myofascial pain
 - Hypertrophy
 - Contracture
 - Myositis
 - Spasm
 - dyskinesia/dystonia
 - pain due to systemic or central disorders (fibromyalgia, centrally mediated myalgia)

What is TMD?

- Set of conditions that affect the masticatory muscles and/or joints, with pain as the primary clinical manifestation.
- Most common cause of chronic pain in the orofacial region.
- Restricted range of mandibular motion, tenderness to palpation, joint sounds and disc displacements
- Associated muscle pain (myalgia), myositis, muscle hypertrophy, movement disorders(orofacial dyskinesia) masticatory muscle pain attributed to systemic pain disorders (fibromyalgia)






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I N f o R M
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A Consortium Focused On Clinical Translation Research

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[Other Instruments](#)

TMD ASSESSMENT/DIAGNOSIS

DC-TMD

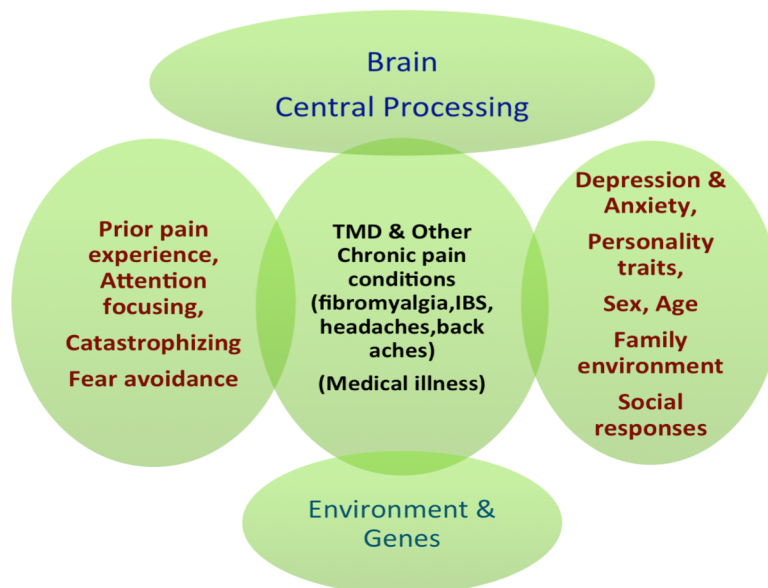
Diagnostic Criteria for Temporomandibular Disorders (2014)

Diagnoses

11. Diagnoses

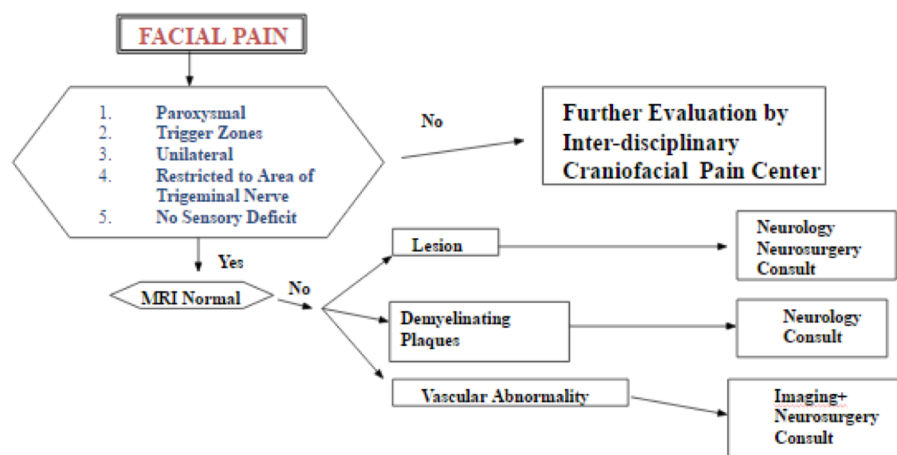
Pain Disorders	Right TMJ Disorders	Left TMJ Disorders
<input type="radio"/> None	<input type="radio"/> None	<input type="radio"/> None
<input type="radio"/> Myalgia	Disc displacement (select one)	Disc displacement (select one)
<input type="radio"/> Myofascial pain with referral	<input type="radio"/> ...with reduction	<input type="radio"/> ...with reduction
	<input type="radio"/> ...with reduction, with intermittent locking	<input type="radio"/> ...with reduction, with intermittent locking
<input type="radio"/> Right Arthralgia	<input type="radio"/> ... without reduction, with limited opening	<input type="radio"/> ... without reduction, with limited opening
<input type="radio"/> Left Arthralgia	<input type="radio"/> ... without reduction, without limited opening	<input type="radio"/> ... without reduction, without limited opening
	<input type="radio"/> Degenerative joint disease	<input type="radio"/> Degenerative joint disease
<input type="radio"/> Headache attributed to TMD	<input type="radio"/> Dislocation	<input type="radio"/> Dislocation

12. Comments



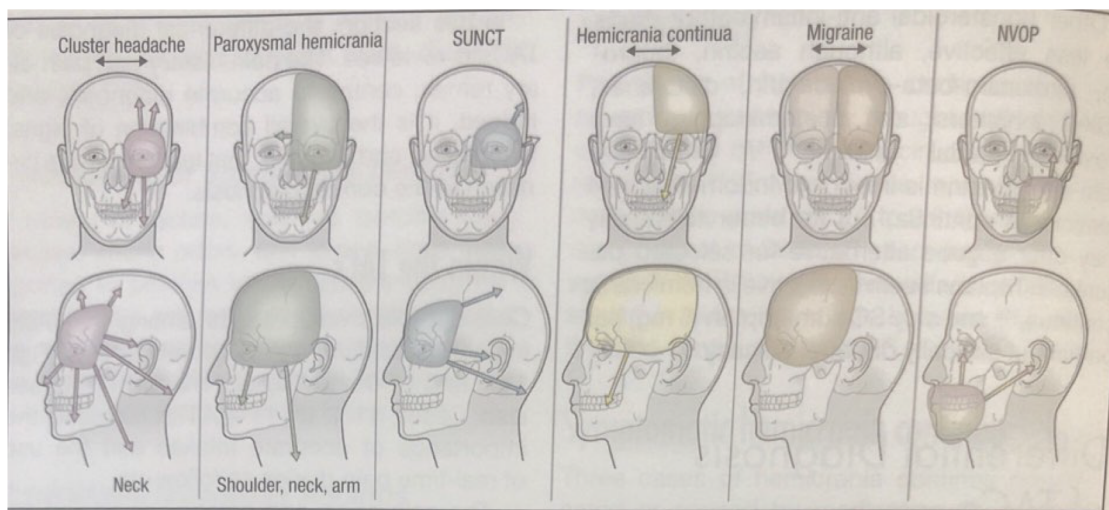
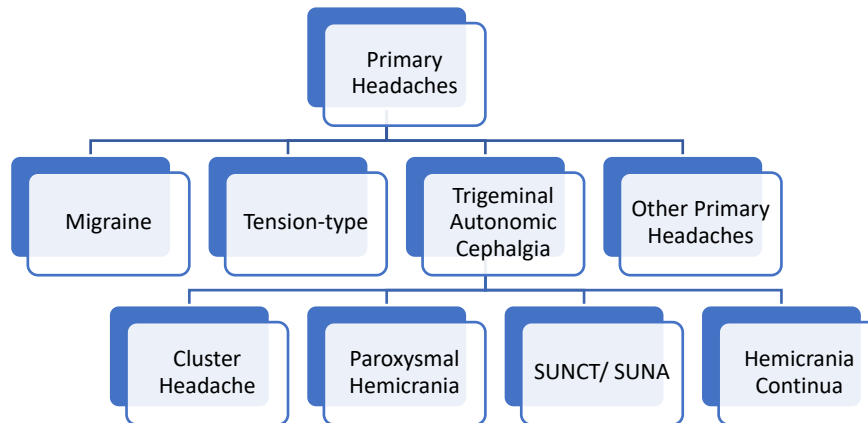
- “**Neuropathic pain** is a clinical description (and not a diagnosis) which requires a demonstrable lesion or a disease
- *Based on symptomatology*, neuropathic orofacial pain :episodic and continuous
- **Episodic neuropathies**: short electrical or sharp pain that may be paroxysmal, as in trigeminal neuralgia.
- **Continuous burning pain**: posttraumatic neuropathy or inflammation in nerve structures (neuritis), Burning Mouth Syndrome
- *Depending on the location of the initiating event*,
- neuropathic pain :peripheral or central.
- Occurrence of neuropathic pain: spontaneous (stimulus-independent) or touch-evoked (stimulus-dependent)

Diagnosis



SJ Scrivani

Neurovascular Pain



A clinical scenario

- A 41 year old woman complains of strong pain around the eyes, forehead and maxillary teeth, usually unilateral but may be both sides too. Pain is throbbing with superimposed sharp pain and lasts from 9 to 48 hours depending on rest and any medication. History of similar though milder pain which began at the age of 15 years and over the years, pain has become stronger and more frequent.
- Pain is accompanied by photophobia and nausea.
- She reports having had “TMJ” which was diagnosed by her primary doctor many years ago and she wore a mouth guard for about 5 years. Recently, she reports pain increases on chewing and sometimes she feels a throbbing pain on ipsilateral molars. Her primary referred her to you.
- Medical history: Hypothyroidism since age 35 years for which she takes levothyroxine and she has been taking oral contraceptives pills for 5 years with no change in headache parameters
- Her mother and one of her siblings have been suffering from migraines until menopause.

- What do we do when we can't find a visible measurable etiology?



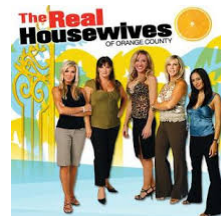
Refer to psychologist



Call it a headache



Analgesics

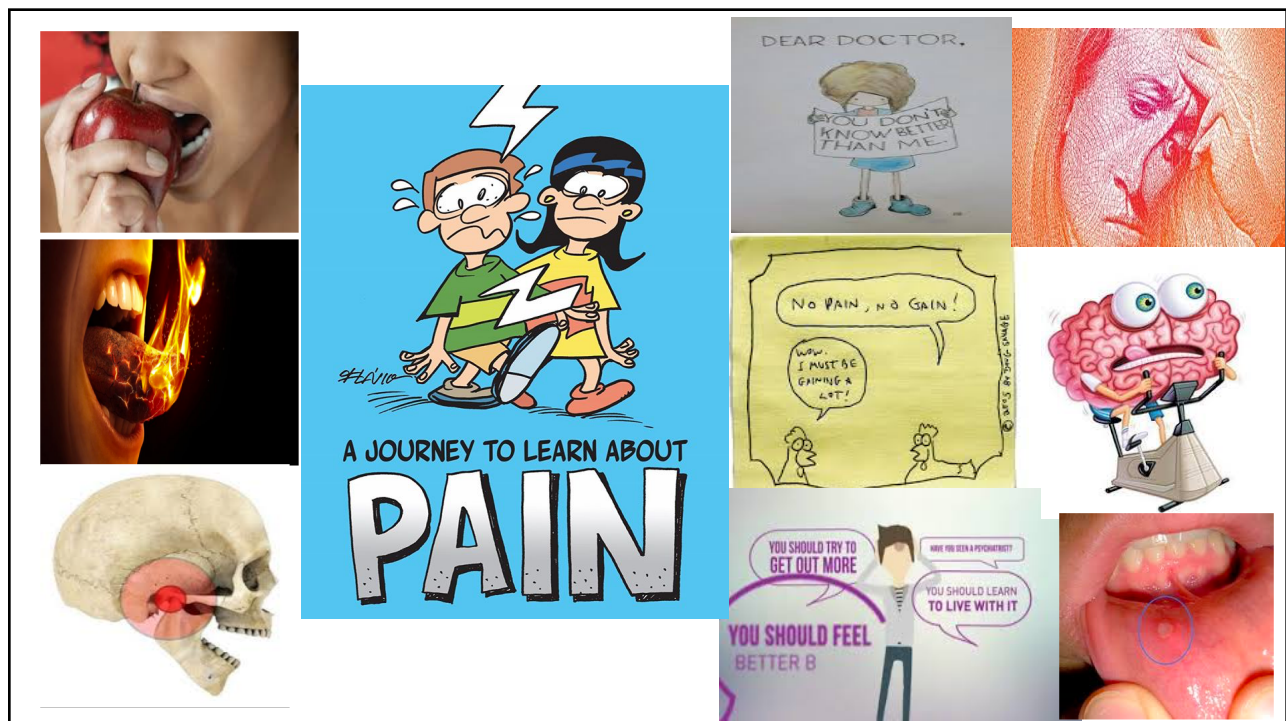


Blame it on culture / lifestyle



Make it a Dental Issue?

Treatment? Management? *BOTH?*



- Thank you