Chronic Orofacial Pain- Disease or Symptom?

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Chronic Pain Affects One in Three American Adults

- Chronic pain costs the U.S. at least $560-$635 billion annually, an amount equal to about $2,000.00 for everyone living in the U.S.

- According to a recent survey, more than half of the participants reported that they had very little or no control over their pain.
Do you suffer from any of the following?

**Head Pain, Headache**
1. Forehead
2. Temples
3. “Migraine” type
4. Sinus type
5. Shooting pain up back of head
6. Hair and/or scalp painful to touch

**Eyes**
1. Pain behind eyes
2. Bloodshot eyes
3. May bulge out
4. Sensitive to sunlight

**Mouth**
1. Discomfort
2. Limited opening of mouth
3. Inability to open smoothly
4. Jaw deviates to one side when opening
5. Locks shut or open
6. Can’t find bite

**Teeth**
1. Clenching, grinding at night
2. Looseness and soreness of back teeth

**Ear Problems**
1. Hissing, buzzing or ringing
2. Decreased hearing
3. Ear pain, ear ache, no infection
4. Clogged, “itchy” ears
5. Vertigo, dizziness

**Jaw Problems**
1. Clicking, popping jaw joints
2. Grating sounds
3. Pain in cheek muscles
4. Uncontrollable jaw and/or tongue movements

**Neck Problems**
1. Lack of mobility, stiffness
2. Neck pain
3. Tired, sore muscles
4. Shoulder aches and backaches
5. Arm and finger aches and backaches

**Throat**
1. Swallowing difficulties
2. Laryngitis
3. Sore throat with no infection
4. Voice irregularities or changes
5. Frequent coughing or constant clearing of throat
6. Feeling of foreign object in throat constantly
Trigeminal Convergence
Pressure and Motion
"jaw clenching reflex"
There has been ongoing debate over whether chronic noncancer pain is a syndrome or a disease entity unto itself. Compelling research evidence suggests that no matter what brought on the condition — acute injury, precipitating disease, or unknown factors — chronic pain ultimately manifests as a distinct brain disease, which impacts all aspects of the individual’s life and may become irreversible.
Scien. Retrea on Pain Research

BDNF

CRH

Hippocampus

PVN

CRF

Amygdala

Hippocampus

DA

SHI

NE

Cytokines

Parasympathetic

Ach

Sympathetic

NE

Cortisol

ACTH

Adrenal cortex

Primary afferent neuron

Microglia

IL-1β, TNFα, IL-6

NO, PGs, ATP

SP, Glu, IL-8, BDNF
Who are Orofacial Pain patients?

- **34%** of population will be affected by a significant TMD problem
- **10-12%** of this group will have recurring symptoms yearly

  *Von Korff et al. Pain*

- Less than **19%** of TMD pain patients have facial pain only

  *Turp et al. J Dent Res*

- TMD patients high co-morbidity:
  - fibromyalgia
  - irritable bowel syndrome
  - sleep disturbances
  - chronic fatigue syndrome
  - headache
  - interstitial cystitis
  - concentration problems
  - multiple chemical sensitivities

  *Aaron et al. Arch Intern Med*

- **40-70%** of chronic pain pts are victims of sexual-physical abuse

  *Curran et al. J Orof Pain*
Summary Health Statistics for U.S. Adults: National Health Interview Survey, 2009
Department of Health and Human Services Report

• Women were more likely to experience pain (in the form of migraines, neck pain, lower back pain, or face or jaw pain) than men.

• Women were twice as likely to experience migraines or severe headaches, or pain in the face or jaw, than men.
Oral pain

Non-dental
- Oral malignancy
- Mucosal lesions
- Atypical odontalgia
- Burning mouth syndrome
- Salivary gland pathology
- Trigeminal neuropathic pain

Dental
- Pulpitis
- Cracked tooth syndrome
- Dentine sensitivity
- Abscess

Headache
- Trigeminal autonomic cephalalgias
- Migraine
- TMD associated headache

Facial pain
- Giant cell arteritis
- Post herpetic neuralgia
- Temporomandibular disorder (TMD)

Source: Headache © 2014 Blackwell Publishing
Pain frequency

Infrequent flares <4 days per week

Analgesics
- Ineffective or require excessive doses
  - Short-acting opioids

Physical therapy
- Flare management: oscillatory movements, distraction techniques, trigger point massage

Psychology
- Relaxation Stress management

Relaxation
- Neuropathic pain; burning quality, nerve injury, neuralgia

Additional features
- Structural pathology with disability and/or overuse of analgesics

Frequent flares of constant disturbing pain

Physical therapy
- Stretching exercises

Occupational therapy
- Body mechanics
  - Work simplification
  - Pacing skills

Psychology
- Cognitive restructuring
  - Relaxation Stress management

Reconditioning
- First-line
  - Antidepressants: TCA, SSRI
    - Gabapentin (Neurontin), lamotrigine (Lamictal)

- Adjunctive
  - Capsaicin cream (Zostrix)
    - Mexiletene (Mexilil)
  - Long-acting opioids
History & Examination

Diagnoses
(acute vs chronic)
(injections)

Physical Self-Regulation

Consults to Other Medical Specialties

Psychology, Psychiatry

Diet and Common Drug Counseling

Splint Therapy

Pharmacotherapy

Injection Therapy

Surgical Therapy
Future Collaboration: COFP

- Studies powered to a sufficient N
- Non-convenience samples
- Identify multiple pain sources
- Fidelity in the cohort
- Identify co-morbid conditions
- Have more rigor in our diagnostic criteria
- Efforts must be multidisciplinary

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Scientific Retreat on Pain Research