Atypical Facial Pain: An Integrative Approach

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“Doctor, I have terrible sinus headaches”
Atypical Facial Pain

Frazier and Russell 1924

• Pain along the territory of the trigeminal nerve that does not fit other cranial neuralgias
• Lasts most of the day
• Unilateral
• Without autonomic signs and symptoms
• Described as severe ache, burning, or crushing sensation
• No abnormalities on exam or work-up
Persistent Idiopathic Facial Pain

• Pain in the face
• Lasting all or most of the day
• Confined to one side, deep ache, poorly localized
• Not associated with sensory loss or other physical signs, and without abnormalities in lab or imaging studies

• International Headache Society 2004
Demographics

- Male = Female
- Adults
- Incidence believed to be ~ 1 in 100,000
Etiology

- May be initiated by trauma including sinus surgery, dental surgery, facial trauma

- ?Psychological

- Mechanism may be demyelination of the trigeminal nerve, either proximal or distal

- ?Early manifestation of trigeminal neuralgia
Differential diagnosis

- Trigeminal Neuralgia
- Severe, lancinating, shock-like pain that lasts seconds
- Migraine
- Post-herpetic neuralgia
  - Pain that persists 1-6 months following Zoster infection
- TMJ
- Chronic sinusitis
- Rhinogenic headache
• First bite syndrome
• Glossopharyngeal neuralgia
Stylohyoid complex syndrome (Eagle)

- Stylohyoid complex syndrome includes all lateral neck and/or facial pain conditions resulting from an elongated styloid process, ossified stylohyoid ligament, or elongated hyoid bone. Surgical intervention directed at any pathologic point to disrupt this complex relieves tension and offers patients relief of symptoms.

• Raeder syndrome
  • V1 distribution of a unilateral burning pain
  • May be associated with miosis, ptosis, and hyperesthesia
  • Can be due to a middle fossa tumor, sinusitis, or syphilis

• Thalamic Pain syndrome
  • Severe burning, aching unilateral facial pain
  • May be associated with dysesthesias
  • Due to contralateral ventral-medial thalamic nuclei lesions
Causes of orofacial pain

Local diseases
- Teeth and supporting tissues
- Jaws
- Maxillary antrum
- Salivary glands
- Eyes

Psychogenic pain
- Atypical facial pain and other oral symptoms associated with anxiety or depression (such as mandibular pain-dysfunction)
- Burning mouth syndrome

Referred pain
- Angina
- Lesions in neck or chest (including lung cancer)

Neurological disorders
- Trigeminal neuralgia
- Malignant neoplasms
- Multiple sclerosis
- Herpes zoster
- SUNCT syndrome

Vascular disorders
- Migraine
- Migrainous neuralgia
- Temporal arteritis (giant cell arteritis)
- Paroxysmal hemicrania
- Neuralgia-inducing cavitational osteonecrosis
Workup

- Imaging
- MRI/CT
- Dental
- Neurology
- Psychological
- Psychiatric
Integrative Approach to Atypical Facial Pain

- Thorough work-up done
  - Imaging, neurology, dental
- Standard therapies have been tried with unsatisfactory results
  - Treatment of sinonasal disease, pharmacologic headache therapy, pain management
- Consider an integrative East-West Medicine approach
“Integrative medicine encompasses the whole spectrum of health care interventions from prevention to treatment to rehabilitation and recovery.”

Harvey Fineberg, MD, PhD
President
Institute of Medicine
Philosophy

Modern Western Medicine (MWM)
- Reductionistic
- Microscopic
- Structure
- Quantitative
- Separation of Mind-Body

Traditional Chinese Medicine (TCM)
- Holistic
- Macroscopic
- Function
- Qualitative
- Preservation of Mind-Body
Integrative East West Medicine

Traditional Chinese Medicine
Wide-Angle Lens = Holistic

Western Medicine
Telephoto Lens = Reductionistic

UCLA Center for East-West Medicine
Acupuncture
MOTHER GOOSE & GRIMM by Mike Peters

TELL ME, DOES ACUPUNCTURE REALLY WORK?
“Acupuncture restores the homeostatic balance by a differential effect of suppressing hyperfunction, stimulating hypofunction, and regulating disturbed function.”

Acupuncture (Meridians)

- Extensive network of channels in the human body (*meridians*)
- There are specific points found along these meridians called *acupoints*
- Qi is said to concentrate and flow through these meridians
- Acupuncture maintains a free and adequate *flow* of Qi and restores *balance* to achieve optimal health
Acupuncture
(Modern Research)

NIH Consensus Conference
(JAMA, 1998; 280: 1518-24)

• Shown to be effective in post-operative pain, dental pain
  nausea/vomiting (especially post chemotherapy)
• Recommended as an adjunct treatment in addiction, stroke rehab
  asthma, headaches, fibromyalgia, myofascial pain, osteoarthritis,
  low back pain, carpal tunnel syndrome, tennis elbow, menstrual
  cramps
A combined treatment with D-amino acids and electroacupuncture produces a greater analgesia than either treatment alone; naloxone reverses these effects. (Pain 1980 Apr;8(2):231-6)

Cheng RS, Pomeranz B.

The D-amino acids (DAA), D-phenylalanine and D-leucine, produce naloxone reversible analgesia; electroacupuncture (EA) also produces analgesia which is blocked by naloxone. Combining the two treatments produces an additive effect with a larger analgesia than that produced by either treatment given alone; this combined effect is also blocked by naloxone. Moreover only 62% of the mice show EA analgesia and 53% show D-amino acid (DAA) analgesia; 80% of the animals show marked analgesia with both EA plus DAA treatment. Perhaps the combination of EA with DAA will provide a potent method for the treatment of clinical pain.
Acupuncture Modulates the Limbic System and Subcortical Gray Structures of the Human Brain: Evidence From fMRI Studies in Normal Subjects

Kathleen K.S. Hui, Jing Liu, Nikos Makris, Randy L. Gollub, Anthony J.W. Chen, Christopher I. Moore, David N. Kennedy, Bruce R. Rosen, and Kenneth K. Kwong

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4Department of Psychiatry, Massachusetts General Hospital and Harvard Medical School, Boston, Massachusetts
Large Intestine 4 (LI-4)

**Location:** Found at the highest spot of the muscle when the thumb and index fingers are brought together

**Indications:** stress, headaches, toothaches, facial pain, trigeminal neuralgia, neck pain, nasal/sinus congestion

**Caution:** can induce labor in pregnant women.
Large Intestine Meridian
Acupoints for Headaches & Facial Pain

Other indications:

**ST 8:** migraine/tension HAs, facial motor tics, dizziness

**ST 7:** TMJ, otalgia, tinnitus

**ST 4/5/6:** Bell’s palsy, lockjaw/trismus

**ST 3:** maxillary sinus congestion
Summary

• Atypical facial pain remains an elusive diagnosis and challenging clinical entity to treat

• Thorough evaluation is needed
  • Imaging, dental, neurology, psychiatry

• Many treatments may need to be tried
  • Pharmacologic agents, pain management techniques

• Consider an integrative approach for management of atypical facial pain
  • Holistic approach, acupuncture