

INTERNATIONAL ACADEMY OF ENDODONTICS (IAE) _ 2019

ESSAY:

Refractory atypical orofacial pain syndromes that do not respond favorably to traditional treatments are often postulated as a manifestation of psychological distress. The standard for managing orofacial pain is still largely dependent on biomedical interventions for long-term pain management. When all extensive dental and medical diagnostics have been ruled out, and in the absence of organic pathology, physiologic stress is presented as a causative variable in the pathomechanism of persistent facial pain, and parafunctional habits.

Recent studies have elucidated the relationship of facial pain to sympathetic tonus. Despite extensive research on facial pain development, little is known about the effect of disturbed breathing chemistry, and its role as pro-inflammatory and physiological stressor in the body. The sustained stress loading, via carbon dioxide depletion and autonomic disequilibrium, provide new insight in the management of the patient with chronic orofacial pain. This lecture includes new insight in understanding the patient from a physiological perspective, describes the rationale in addressing diurnal maladaptive stress responses, strategies to overcome dysfunctional breathing, fractionated sleep, and oral behaviors. The presentation will include a brief case study summary.

BRIEF SYNOPSIS:

This presentation brings new light to the role of breathing dysfunction and autonomic dysregulation in the pathogenesis of atypical orofacial pain. The sustained allostatic loading, also known as wear-and-tear in the autonomic nervous system, in connection to the patient's maladaptive stress responses, is found to play a causative role in the facial pain development.

MAJOR TOPICS TO BE ADDRESSED:

- Breathing behaviors can override the natural, involuntary brain stem breathing chemoreflex.
- Physiologic stress can be quantified in the context of behavior and daily activities.
- Disturbed breathing stresses the physiology via the Henderson-Hasselbalch equation.
- Diurnal maladaptive stress responses lead to nocturnal parafunctional habits and vice versa.
- Diurnal breathing chemistry (ETCO₂ balance) is not well studied.
- Stress adaptation via homeostatic breathing training yields favorable results in patients with atypical orofacial pain.
- There is an urgent need to focus on preventative efforts to counteract the effects of stress in our society.

LEARNING OBJECTIVES

1. Expand your toolbox the diagnostic criteria-when to suspect physiologic stress?
2. Learn how carbon dioxide depletion causes unfounded stress manifestations in your patient.
3. Patient education and short term intervention samples.

BIOGRAPHIC



Roberto de Guevara, OTR, MS
Founder of Respiras Breathing™

Roberto is an occupational therapist and respiratory consultant whose work has been dedicated to uncover the effects of disordered breathing patterns in connection to chronic illnesses, pain syndromes, and sleep disorders. Inspired by the mass need to challenge the old-established ways of just “managing” stress, RespirasBreathing™ was created as a revolutionary, science-based, educational technology system dedicated to giving patients the skills needed to successfully adapt to the stress of life, improve sleep, enhance work productivity, and achieve functional relaxation.

Roberto is a consultant, educator, researcher, scientist, practitioner, and active lecturer in the U.S. and Japan. He has served as a consultant and trainer for the U.S. Army, training soldiers on respiratory efficiency for stress adaptation and combat-related stress. RespirasBreathing™ is known in the medical and dental fields for its 100-percent dedication to breathing function and stress adaptation.

AFFILIATIONS

American Association Of Occupational Therapy.

American Academy Of Sleep Medicine.

American Thoracic Society.

PUBLICATIONS:

Probable etiology of arousal and anxiety on cellular level; is it the key to recover from exaggerated anxiety?

New aspects in the pathomechanism of diseases of civilization, particularly psychosomatic disorders.

Part 1. Theoretical background and hypothesis.

New aspects in the pathomechanism of diseases of civilization, particularly psychosomatic disorders.

Part 2. Chronic hypocapnia and hypercapnia in the medical practice.