

Obstructive Apnea and Pain  
By  
Arthur M. Strauss, DDS  
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We all know how we are instructed to “breathe through the pain”. How about “go with it, don’t resist.”

Ever wonder why this works?

In an article titled “11 Tips for Living with Chronic Pain” posted on WebMD the first two are:

- Learn deep breathing or meditation to help you relax, and,
- Reduce stress in your life. Stress intensifies chronic pain.

Obstructive sleep apnea (OSA) studies show a high incidence of heart disease, high blood pressure, diabetes, hyperthyroidism, and, in children, ADHD. The relationship is found in the “stress” response. This is triggered by a decrease in airway patency reducing airflow and oxygen enough to trigger the “fight or flight” or stress response.

The anatomy of the jaw-tongue-throat (JTT) involves numerous muscles and muscle interactions, which when in harmony, allow for sufficient airway patency, so as not to impact other parts of the body. This starts with the head, neck, upper chest and shoulders and continues to the fingertips and toes.

This is relevant both while asleep and when awake. This JTT relationship is structurally unstable and, while documented as the major factor contributing to OSA effects while one is asleep, its same decreased stability contributes to obstructive apnea (OA) while one is awake.

The physiologic measurements of both, if made with extensive sensitivity, while awake and while asleep, show decreased or thwarted air intake triggering the stress response. This is repeated over and over again. The only time “stress” is absent is when we are “in the zone”, “in a moment of grace”, “at peace”.

The loss of airway patency while asleep is due to loss of muscle tone from deep relaxation and while awake it is due to loss of both muscle tone and coordination from the “shock” of distraction upsetting the equilibrium.

Meditation and focus significantly decrease the number of thoughts and apparent awareness to all sensory changes that can trigger loss of muscle coordination. Deep breathing that fills the lungs creates enough oxygen reserve to render the “trigger” less sensitive.

An appropriately designed oral appliance can both stabilize the muscles and facilitate more effective and deeper breathing. Orthodontic treatment and/or surgery can facilitate a more stable JTT relationship.

Consequently, the anatomical, physiological, biochemical and spiritual outcome of these is less stress on all systems resulting in reduced pain or “dis-ease” and increased health, happiness and inner peace.