



Posturedontics Ergo-News

The Comprehensive Wellness Resource for Dental Professionals

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Upper Back Pain in Dental Professionals

Issue #11

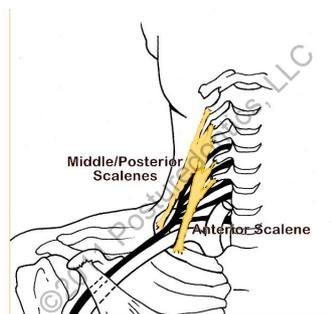
Greetings!

Due to time & space constraints, it is impossible to cover all of the important pain syndromes, etiologies, ergonomic interventions and self treatments for dental professionals in a single seminar, book or DVD. Of the topics not covered in those media, one of the areas I've received the most inquiries about is upper back pain. While our natural inclination is to identify a structure or muscle located in the upper back as the most likely culprit for upper back pain, the actual perpetrator that stirs up the most trouble and pain is not even located in the back. Its location may surprise you.....

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UPPER BACK PAIN & TRIGGER POINTS - Part 1

Though not quite as common as low back pain, upper-back pain is often experienced among team members. The thoracic spine attaches to the ribs, forming a rigid encasement that protects the lungs and vital organs. It is less mobile than the cervical and lumbar spine, so trauma here is rarely due to disc degeneration. More often, this type of pain is from muscles and ligaments. Referred pain from trigger points (TPs) easily develop in the scalene, levator scapula, thoracic paraspinal, rhomboid and trapezius muscles due to stooped, leaning postures and sustained reaching in front of the body, as is common in dentistry.



Of these muscles, the **scalenes**, located deep in the front and sides of the neck, are involved with upper back pain up to 80% of the time. (Gerwin) Scalene TPs are frequently misdiagnosed by healthcare professionals as rhomboid trigger points, since pain is rarely felt in the scalene muscles themselves. Trigger points in these muscles are also a common cause of thoracic outlet syndrome.

Scalene trigger point symptoms include:

- Pain in the medial border of the scapula and interscapular pain

[Learning Resources](#)

Topics include:

- [Operator Stools](#)
- [Trigger Points and Low Back Pain](#)
- [Hand Pain](#)
- [Outdoor Recreation](#)
- [Low Cost Ergonomic Modifications](#)
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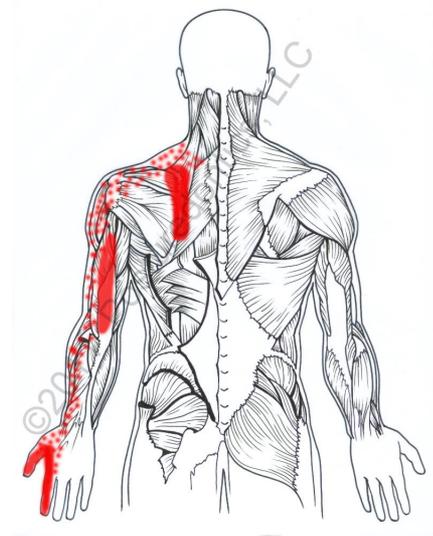
WHERE TO START?

It can be confusing to know where to begin in your journey to optimize your health. Research shows that certain interventions should be implemented before others. Download a FREE REPORT: ***The 6 Keys to Wellness in Dentistry: Essential Steps to Improve Your Musculoskeletal Health.***

[CLICK HERE TO READ](#)

Do you have friends who would benefit from this newsletter? Why not forward it

- Aching pain in the chest area (often mistaken for angina pectoris)
- Pain and weakness in the front/back of the arms and thumb side of the hand and index finger
- Dropping of objects
- Moving the arm and neck restlessly, to apparently relieve the discomfort



Since the scalenes' primary job is to stabilize your neck against sideways movement, it is easy to see why dental professionals are so vulnerable to developing trigger points in them. Victims of motor vehicle accidents are especially prone to developing severe trigger points in the scalenes, so *team members who have been in MVAs should be familiar with all scalene T.P. referral patterns and highly vigilant with preventive strategies.*

ERGONOMIC INTERVENTIONS

1. Position the patient properly Team members who persistently lean the head to one side to view the treatment area or infrequently use their mirror will have a difficult time resolving their scalene TPs. Special patient positioning guidelines must be observed to maintain level shoulder posture during all treatment. See video from [Positioning for Success](#) DVD. For more video excerpts, please [click here](#).

2. Properly angle the overhead light Contrary to what most dental professionals were taught in school, the overhead light should parallel your line of sight to within 15 degrees. (Rucker) Therefore, it should be positioned slightly behind and to one side of your head. See above video link for light positioning.

3. Armrests Simply taking the weight of the arm off these scalene muscles can help reduce perpetuation of trigger points.

4. Good declination angle Since forward head posture is a contributing factor to scalene trigger points, make sure your scopes have an excellent declination angle (see [Dental Ergonomic Loupes Reviews](#)).

5. Chest breathing Shallow, chest breathing, which commonly occurs in the operatory, and can easily cause scalene TPs. Make a concerted effort to use diaphragmatic breathing (stomach goes out when inhaling, not in!) whenever possible.

SCALENE FUN FACTS

Scalene TPs are common in people who 'suck in their gut' to improve their appearance, since this causes chest breathing.

Foam pillows, that have a 'springy' property to them, can worsen scalene TPs.

Cold temperatures can increase hyper irritability of the scalene muscles.

Team members prone to emotional stress are especially susceptible to scalene TPs

Pilates exercises that require lifting the head off the floor for prolonged periods of time can worsen scalene TPs.

Curling the head forward while performing sit-ups can cause and worsen scalene trigger points.

Upcoming Lectures

April 29, 2011 -
Oklahoma State Dental
Association, *Tulsa, OK*

May 3, 2011 -
Heartland Seattle Study
Club, *Fargo, ND*

May 13, 2011 -
Madison Seattle Study
Club, *Madison, WI*

May 30, 2011 -
Montreal Annual
Convention - *Montreal,
Quebec*

June 17, 2011 -
ADHA Annual
Conference - *Nashville,
TN*

July 28, 2011 -
RDH Under One Roof -
Chicago, IL

September 17, 2011 -
Pacific Rhapsody -

The scalene muscle that refers most strongly to the upper back is the *anterior scalene*, which should be a primary focus of therapy.



Stretching It is imperative to stretch your scalenes frequently (up to 4-5 times per day) if you are going to resolve the trigger points. It is most effective to anchor one hand under the seat of a chair and use the other to increase the stretch (see picture, left). *To target the anterior scalene, bring ear toward shoulder, and then tilt the head slightly backward and look up and toward the side being stretched.* [DOWNLOAD A CHAIRSIDE STRETCHING CHART](#)

Moist heat The scalene muscles are sensitive to cold, so a warm, *moist heat* (NOT hot!) can be applied over the scalene for 10 minutes or so before stretching.

Therapy for scalene trigger points The scalenes are located deep in your neck and can be difficult to locate. It is best to have a skilled therapist treat these manually or with a spray & stretch technique. Look for a *physical therapist* who has NAIOMT training (see www.naiomt.com) or is a certified neuromuscular therapist (see www.iahp.com).

Massage your own scalene trigger points It can be tricky to locate your scalene trigger points—you obviously don't want to stick a Backnobber tool in your throat! You must have excellent knowledge of anatomy, as there are vital neurological and vascular structures in close proximity to the scalenes. Clair Davies offers instruction and diagrams for self-treating your own scalene trigger points in [The Trigger Point Therapy Workbook](#). An excerpt follows, "*The scalenes cling closely to the neck....to massage the anterior scalene, you have to get your fingers between the neck vertebrae and SCM muscle. To do this, first grip the (left) sternocleidomastoid between your (right) fingers and thumb as if you were going to massage it. Then let go with your thumb, and with your fingers, pull the entire SCM toward the windpipe.....In this position, you can mash the anterior scalene against the vertebral column with the tips of your fingers.*"

Be sure to reference Davies' book for the entire technique, precautions and treatment of middle and posterior scalene.

NEW! WHEELCHAIR TRANSFER DVD KIT NOW AVAILABLE!

Medically compromised patients can pose a challenge in the operating room and untrained team members can easily injure themselves without proper transfer

Burnaby, British Columbia

September 23, 2011 - Greater St. Louis Dental Society, St. Louis, MO

September 30, 2011 - Lane County Dental Society, Eugene, OR

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equipment. Learn 3 techniques to safely transfer patients in the dental operator with this instructional DVD, gait belt and laminated wall poster. High-quality gait (transfer) belt is anti-microbial treated material and is washable (adjustable 70" long).



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[Posturedontics, LLC](#)

was developed by a dental ergonomic consultant/physical therapist and clinical dentist to provide dental professionals with quality, research-based ergonomic education, products and resources. We value your input and ideas for future newsletters.

Please send us your ergonomic success stories!

