Fitness 101 for Dental Professionals: 
Secrets for Comfort and Career Longevity

Gulf Coast Dental Conference
June 6, 2019
Orange Beach, AL

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Contributing Risk Factors in Dentistry

5 Steps to Practicing Dentistry Pain-Free
1. Dental Ergonomics
2. Stress Management
3. Myofascial Self-Treatment
4. Chairside Stretching
5. Muscular Endurance Training

#2 STRESS MANAGEMENT
Risk Factors
- Time management
- Technical perfection
- Anxious/uncooperative patients
- Malfunctioning equipment
- Team member controls
- Heavy workload

Stress Management
- Breathing Strategies
- Progressive relaxation
- Visualization
- Autogenics

#3 MYOFASCIAL SELF-TREATMENT
ACUTE PAIN
- Pain at rest – usually severe “7-8” range
- Swelling or heat in the area
- Sudden onset, usually lasts 3-5 days
- Restricted movement
- Early treatment EXTREMELY important during this phase

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RED FLAG SYMPTOMS
When pain may NOT be musculoskeletal in origin. Call your doctor immediately!
- If your symptoms increase with rest and during the night.
- If you cannot reproduce the pain with body movement or positioning.
- If the symptoms cover a large, non-specific area and are hard to pin-point.
- If symptoms migrate from one joint to another.
- Numbness and/or muscle weakness that does not subside.
- Dizziness, nausea, blurred vision, severe headache, loss of balance, or fever.
CHRONIC PAIN
- Most common type among dental professionals
- Moderate pain “3-6” on pain scale
- Pain usually localized, and felt “on & off”
- Often the result of years of awkward, repetitive posturing
- Takes longer to recover from, requires change of habits

A Backnobber tool and small hard ball are effective for treating most trigger points.
- Find the trigger point
- Apply deep pressure for 5 slow counts, then massage slowly across the point for 5 counts
- Alternate between deep pressure and slow massage for one minute per trigger point
- Aim at a pain level that “Hurts so good” (about 4-5 on a scale of 1-10)
- Perform a 30-60 second stretch to the affected area.
- Repeat 3-5 times/day if possible

#4 CHAIRSIDE STRETCHING
How to Stretch Safely
- Move into and out of a stretch slowly.
- Breathe in and exhale slowly as you increase the stretch to a point of mild tension or discomfort.
- Hold stretch for 2-4 breathing cycles.
- Try stretch toward both sides to determine tightest side. Stretch toward the tightest side during the workday. Perform stretches in both directions at home and on weekends.
- Do NOT stretch in a painful range. Discontinue stretching if pain increases following stretching.

#5 MUSCULAR ENDURANCE TRAINING
Endurance training
- Good for targeting the postural muscles.
- Essential for preventing injuries and for maintaining optimal postures in prolonged, static postures.
- Focuses on high repetitions and low weight.

Power training
- Tends to target the more superficial mover muscles which are designed for power.
- Training focuses more on low repetitions and high weight.

MUSCULAR ENDURANCE TRAINING:
- Postural stabilization muscles
  - Transverse & oblique abdominals, quadratus lumborum, erector spinae and multifidus
- Scapular stabilizing musculature
  - Middle & lower trapezius, serratus anterior
- Specific rotator cuff muscles
  - Infraspinatus, subscapularis, teres minor

Strengthening Guidelines
- Never perform strengthening exercises if you have pain.
- Strengthening should be done 3 times weekly. (Stretches can be performed daily)
- Always start out mildly and increase gradually.
- Exercise should not cause pain. If you experience pain, stop the exercise.
- Pilates, Crossfit, P90X and other generic programs MUST be modified for dental professionals.
REFERENCES
We are keeping the handout as ‘green’ as possible! Bethany will gladly send you her lecture references upon request. Please e-mail her at bvalachi@posturedontics.com for the lecture references.

RESOURCES
Dr. Valachi’s dental ergonomic book & exercise DVDs: www.posturedontics.com
MediBeads moist heat wraps - www.amazon.com
Trigger Point Therapy Workbook by Davies – www.amazon.com
Backnobber Trigger Point Tool - www.posturedontics.com

LECTURE SUPPLEMENT
YES! I would like to receive Dr. Valachi’s lecture supplement & monthly e-zine!
Type the following into your web browser (NOT Google search!)
www.tinyurl.com/n8ssvkl
(OR...e-mail your full name with FITNESS in the subject line to: info@posturedontics.com)

About the Speaker

Dr. Bethany Valachi, PT, DPT, MS, CEAS is a physical therapist, dental ergonomic consultant and author of the book, “Practice Dentistry Pain-Free: Evidence-based Strategies to Prevent Pain and Extend your Career”. She is CEO of Posturedontics®, a company that provides research-based dental ergonomic education and is clinical instructor of ergonomics at OHSU School of Dentistry in Portland, Oregon. Recognized internationally as an expert in dental ergonomics, she has delivered over 700 lectures worldwide and also provided expertise on dental ergonomics to faculty and students at numerous dental universities. Dr. Valachi has published over 60 articles in peer-reviewed dental journals and has developed patient positioning and exercise videos specifically for dental professionals. She lives in Portland, Oregon with her husband, Dr. Keith Valachi, who operates a private dental practice. She offers free newsletters, articles and product reviews on her website at www.posturedontics.com.
**Excerpts from the DVD, “Smart Moves for Dental Professionals On the Ball”**  
*All 3 workouts (24 exercises) available at www.posturedontics.com*

- **External Rotation**  
  Slowly rotate the arm outward, then return. Keep elbow pressed firmly against your side throughout the exercise. Perform 10-20 repetitions with each arm.

- **Lower Abdominals**  
  Lie with both knees bent. Lift one leg until the hip is at 90°, then slowly straighten, lightly touch the floor, hold, then return the leg to 90° position. Repeat with the same leg 5-10 times. Do not let your back arch off the floor.

- **Pointer Dog**  
  Pull navel to spine and hold this contraction throughout the exercise. Make sure back is flat and hips are level. Slowly lift the right arm, thumb pointing up, hold 4-5 counts, then lower it. Repeat for each arm and leg, performing 5 lifts on each.

- **Rowing**  
  Position the door anchor at waist level. Slowly pull both hands back towards your waist, keeping thumbs up and forearms parallel to the floor. Pause briefly, and return to start position. Repeat 10-20 times.

- **Extensor Lifts**  
  Position your feet against a wall. Kneel in front of the ball, so the ball is under your pelvis. Cross your arms across your chest or behind your head and slowly raise the head, neck and torso until your back is straight. Slowly lower and repeat 10-20 times.

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**Excerpts from the DVD, “Chairside Stretching’ & Trigger Point Therapy”**  
*All 20 Chairside Stretches available at www.posturedontics.com*

- **NECK & SHOULDER COMBO**  
  Gently pull arm across front of body with opposite arm. Hold 2-4 breath cycles.

- **THE UNTWISTER**  
  Legs in tripod position, resting elbow on knee. Stretch opposite arm overhead and look toward ceiling. Hold 2-4 breath cycles.

- **PECTORALIS STRETCH**  

- **SCALENE STRETCH**  
  Anchor hand behind back or chair. Slowly bring opposite ear toward shoulder. Hold 2-4 breath cycles.

- **TRAPEZIUS STRETCH**  
  Anchor hand behind back or chair. Slowly bring opposite ear toward armpit. Hold 2-4 breath cycles.

- **SHOULDER CIRCLES**  
  Slowly exhale, roll shoulders forward, up and backward returning to the relaxed starting position. Repeat 5 times.

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