

Perfect Posture Mechanics: Part I - Dentistry and Your Body



Course Author(s): Stephanie Botts, RDH, BSDH, CEAS
CE Credits: 1 Hour(s)
Intended Audience: Dentists, Dental Hygienists, Dental Assistants, Dental Students, Dental Hygiene Students, Dental Assistant Students
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Method: Self-instructional
AGD Subject Code(s): 770

Online Course: www.dentalcare.com/en-us/ce-courses/ce667

Disclaimers:

- P&G is providing these resource materials to dental professionals. We do not own this content nor are we responsible for any material herein.
- Participants must always be aware of the hazards of using limited knowledge in integrating new techniques or procedures into their practice. Only sound evidence-based dentistry should be used in patient therapy.

Conflict of Interest Disclosure Statement

- Ms. Botts is the owner of Polished Posture, an ergonomic consulting company. She has no relevant financial relationships to disclose.

Course Contents

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Overview

Practicing dentistry is both unique and challenging from an ergonomics perspective. The practice of dentistry puts clinicians at risk for certain musculoskeletal disorders (MSDs) and injury due to multiple risk factors. The purpose of this course is to alert clinicians to each of these risk factors and the injuries each can cause. Participants will also learn about the most common MSDs in dentistry and the movements that contribute to each.

Additionally, this course will demonstrate the importance of microbreaks and examples of chairside microbreaks and stretches the clinician can implement to reduce pain and fatigue.

This course is part 1 of a 2 part series. Part 2 which will address strategies to maintain proper ergonomics in the operator.

Learning Objectives

Upon completion of this course, the dental professional should be able to:

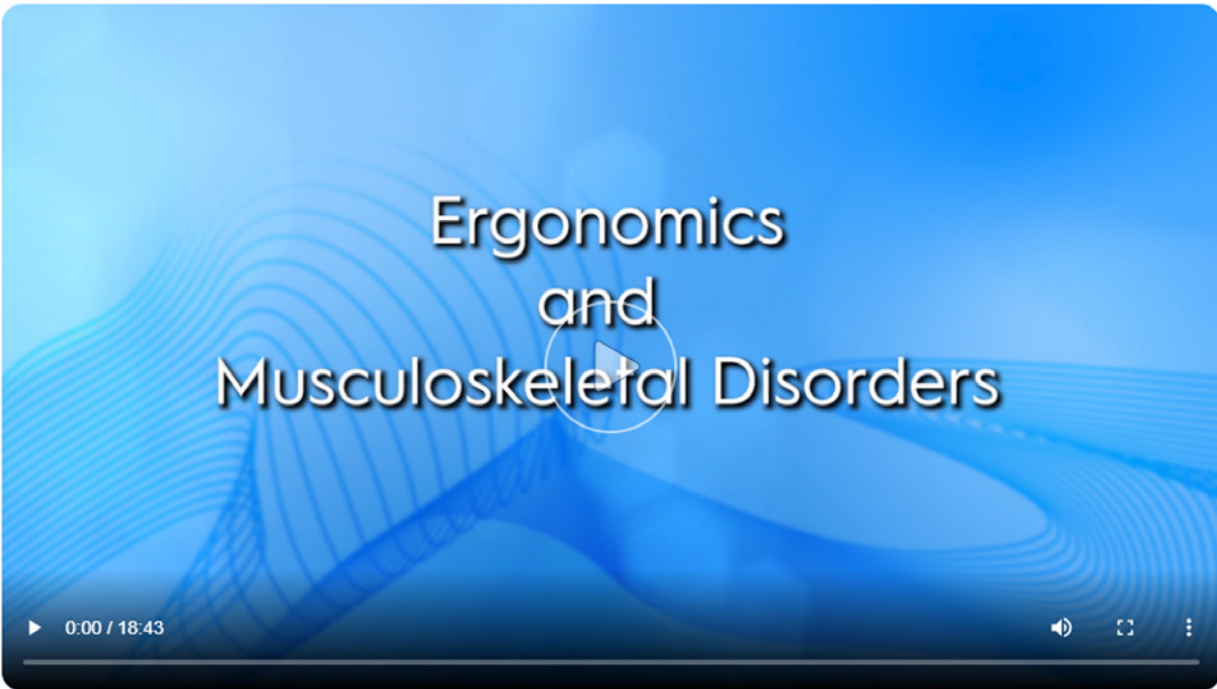
- Identify unique cumulative stress and musculoskeletal disorders that affect dental professionals.
- Understand how to incorporate chairside microbreaks into the workday.
- Understand the multiple risk factors present in practicing dentistry.

Introduction



[Click on image to view video online.](#)

Ergonomics and Musculoskeletal Disorders



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Risk Factors and Microbreaks



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Conclusion

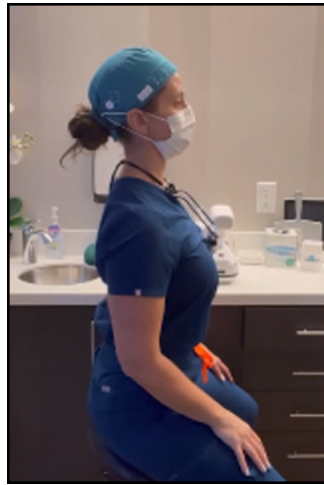
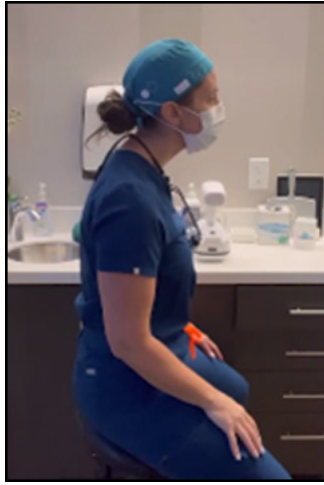


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Microbreaks Supplemental Guide

Step-by-Step Guide for Microbreaks¹⁶

Stretch	Why	Steps
 <p>Trapezius Stretch</p>	<p>Overuse and continued contraction of the Trapezius muscles.</p>	<ol style="list-style-type: none"> 1. Point one hand down toward the ground. 2. Take the other hand and pull head gently down towards the opposite side. 3. Hold 20 seconds. <p>This stretch will be felt along the side of the neck and into the shoulder. Keep tension in arm that is pointing towards the ground.</p> <p>Switch sides and hold 20 seconds.</p> <p>*If stretching while with a patient (gloves on), you can do the same stretch without placing the arm on the head. You would gently put your head to the side.</p>
 <p>Pectoral Stretch</p>	<p>Pectoral muscles are often tight from forward head posture or reaching in front of body. Muscles become short and tight and pull the shoulders forward, this lengthens and weakens muscles in back.</p>	<ol style="list-style-type: none"> 1. Clasp hands behind the back while pointing the hands down towards the floor. 2. Roll shoulders back 3. Hold 20 seconds.



**Cervical Retraction
Stretch
(Chin Tuck)**

Counteracts the effects of forward head posture, improved muscle memory and strengthens muscles in the back. This helps to hold head in neutral posture.

1. Lift through crown of the head.
2. Move your head horizontally back towards your spine.

Recommended: 1 set of 15 reps daily



Wrist Flexor/Extensor Stretch

Excessive grip and pinch force create pressure in the carpal tunnel and muscle fatigue in forearm.

Flexor Stretch:

1. Extend arm out in front.
2. Make a fist.
3. With the opposite hand pull the fist down towards the floor.
4. Hold for 20 seconds each arm.

Extensor Stretch:

1. Arm extended out with palm facing up.
2. Use the opposite hand to pull the fingers down towards the floor.
3. Hold for 20 seconds each arm.



Low Back Flexor Stretch

For lower back issues, from standing a lot or twisting while sitting.

1. Place hands on the low back or the top of the hips.
2. Gently push pelvis forward.
3. Hold 20 seconds.



Prayer Stretch

Reduce pressure in carpal tunnel and fatigue in forearms.

Prayer Stretch:

1. Hold hands in front of face.
2. Slowly bring them down in front of chest.
3. Maintaining light pressure in between the hands.
4. Hold for 20 seconds.

Reverse Prayer Stretch:

1. Place the backs of the hands together in front of abdomen.
2. Slowly bring them up in front of chest.
3. Hold for 20 seconds.

Course Test Preview

To receive Continuing Education credit for this course, you must complete the online test. Please go to: www.dentalcare.com/en-us/ce-courses/ce667/test

- 1. Which best represents the prevalence of work-related pain among dental clinicians?**
 - A. 96
 - B. 50
 - C. 5
 - D. 25
- 2. High pain rates are due to all of the following EXCEPT one, which is the exception?**
 - A. Bending
 - B. Twisting
 - C. Frequent Stretching
 - D. Repetitive movements
- 3. Which are common risk factors for ergonomic injury?**
 - A. Incorrect positioning
 - B. Standing
 - C. Static posture
 - D. A and C
- 4. Which is the pattern in which musculoskeletal disorders typically progress?**
 - A. Suddenly
 - B. Gradually
 - C. Differently for everyone
 - D. Overnight
- 5. Which is a common musculoskeletal disorder in dental clinicians?**
 - A. Carpal tunnel syndrome
 - B. Plantar Fasciitis
 - C. Rotator cuff injuries
 - D. Both A and C
- 6. Which is the goal of ergonomics?**
 - A. Prevent soft tissue injuries and MSDs
 - B. Learn proper posture
 - C. Get new equipment
 - D. Treat pain
- 7. Which describes isometric muscle contraction?**
 - A. Is frequently seen in dental clinicians when performing work duties
 - B. Is not a concern
 - C. Prevents blood from supplying that muscle
 - D. Both A and C

- 8. Lack of blood flow to the muscles causes all of the following EXCEPT one, which is the exception?**
- A. Improved function and comfort
 - B. Pain
 - C. Fatigue & Inflammation
 - D. Eventual damage to the tissue
- 9. Which represents consideration of stretching for a dental professional?**
- A. Is crucial for restoring health and function to the muscles
 - B. Is optional
 - C. Should be done throughout the day
 - D. Both A and C
- 10. Which are true statements regarding microbreaks for improved musculoskeletal function?**
- A. Reduce pain and fatigue in dental practitioners
 - B. Consist of 20- to 30-second stretch breaks every 20 minutes
 - C. Are not necessary
 - D. Both A and B

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Additional Resources

- No Additional Resources Available

About the Author



Stephanie Botts, RDH, BSDH, CEAS

Ms. Stephanie Botts has been a clinical dental hygienist for over 14 years. She is a Certified Ergonomics Assessment Specialist providing both in-office and virtual ergonomics consulting and coaching to dental professionals. She also provides CE to dental and dental hygiene associations on the topic of ergonomics. Her experience as a clinical dental hygienist and ergonomics expert has allowed her to recognize the unique challenges of practicing pain-free in the dental setting. Stephanie believes that by learning effective strategies to optimize proper ergonomics both inside and outside the operator, dental professionals can practice pain-free and ensure career longevity.

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