

Musculoskeletal Disorders: Do You Know the Risks, Signs, and Symptoms?

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My neck, my back, my wrists. Pain, stiffness, and exhaustion. I love what I do so how do I manage my physical condition to prolong my career as a dental hygienist? Does this sound familiar? If it does, you're not alone. I am amazed at how many colleagues I speak with who can relate.

Several years ago I endeavoured to discover why my body was so tired, achy, and uncomfortable. My hope is that my experience as both a dental hygienist and a certified yoga instructor will help to provide you with some insight into the effects of our profession on our bodies.

Did you know the following facts about your profession? [1]

- In 2015, Canadian dental hygienists reported musculoskeletal pain as the most frequent type of discomfort, with symptoms occurring in the neck (65%), shoulders (63%), lower back (49%), wrists/ hands (46%), and upper back (43%).
- In 2015, 75% of Canadian dental hygienists who reported an injury or medical issue related to their work stated that the injury affected their ability to work. Forty-nine percent (49%) of those respondents worked through the pain, while 11% reduced their work hours.

The dental profession is plagued by musculoskeletal disorders (MSDs) [2]. MSDs affect muscles, tendons, tendon sheaths, bursa (fluid filled sacs cushioning joints), blood vessels, joints, spinal discs, and ligaments. MSDs are caused or aggravated by repetition, awkward or static postures, high forces, and contact stress. The greatest risk is often due to improper operator seating, client positioning, and poor work techniques. How much are we taught about the importance of our posture? For me, the answer was none.

Examples of MSDs

Carpal tunnel syndrome (CTS) is one of the most common MSDs among dental hygienists. CTS is caused when the median nerve, which controls sensations to palm side of the thumb and fingers (except the little finger), is compressed or squeezed at the wrist. Symptoms include pain and weakness or numbness in the hand radiating up the arm. It is imperative that we maintain a neutral wrist position as much as possible during instrumentation and perform regular stretching and strengthening exercises to avoid compression and damage to the ulnar nerve (Figure 1).

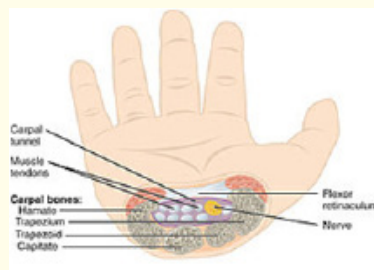


Figure 1: Carpal tunnel.

Source: https://en.wikipedia.org/wiki/Carpal_tunnel

Improper positioning as we work often results in rounding of the shoulders which can compress the nerves, arteries, and veins that supply the arm and hand. In the case of bursitis, the fluid filled bursa sac in the shoulder becomes inflamed. The symptoms include difficulty reaching up and behind the back, pain with overhead use of the arm, and weakness of the shoulder muscles.

More serious still, thoracic outlet syndrome (TOS) can result from the compression of nerves, arteries, and veins as they pass from the neck to the arm through the thoracic outlet. Symptoms can include pain in the neck, shoulder, arm or hand, numbness and tingling of fingers, muscle weakness/ fatigue, and cold sensation in the arm, hand or fingers (Figure 2).

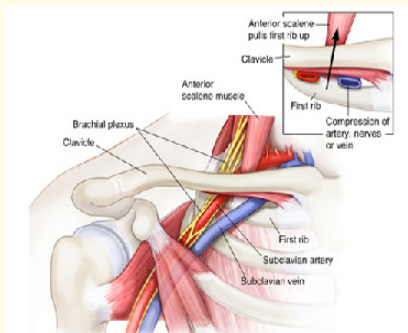


Figure 2: Thoracic Outlet Syndrome.
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It is essential to protect ourselves while we work. Symptoms of bursitis and TOS can be alleviated through awareness of, and focus on, proper upper body posture. Slight engagement of the abdominal muscles helps to protect the lower back and offer stability while seated. Ensuring your shoulders are relaxed can help to reduce tension in the head and neck area. As always, proper strengthening and stretching of these muscles helps to minimize the risk of MSDs.

These are only three of the many MSDs to which registered dental hygienists are susceptible. If you or anyone you know is experiencing pain or symptoms, I encourage you to seek professional guidance to avoid irreparable damage to your body. Yoga and relaxation therapies along with physiotherapy and massage therapy are just a few of the options that you can choose to help prevent or alleviate the pain and risks associated with musculoskeletal disorders.

By maintaining physical and mental health through increased awareness of the risks we take every day and learning how to care for our bodies properly, we can prolong our careers in dental hygiene. I hope this information increases your awareness of the importance of positioning while you work, and I wish you a long, pain-free career!

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