



a new look
at
back
pain

Kurt Klemm PT, MDT explains why proper posture & exercise alone won't eliminate back pain for dental practitioners.

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Back pain has many potential etiologies: discs, facet joints, intervertebral foramen, ligaments, mobility, instability, overuse, strength, endurance, and others. Back pain and dysfunction are often age related as well; I haven't met anyone yet who is getting stronger and more flexible as they age without working at it.

In dentistry, however, back pain is primarily related to muscle overuse, as with repetitive stress or strain injuries. Many dental professionals have uncomfortable familiarity with back pain. While exercise and postural modification can help, the problem is caused by muscle overuse from holding a treatment position.

The problem

People whose work requires a constant upright position can simply correct their posture to address any problems. Take truck drivers, for example. Their constant upright position may produce an increase in lumbar disc pressure and over time, as well as low back and even peripheral symptoms into the lower extremities. This is not a muscular problem, since truck drivers require no real effort to maintain the position. Therefore, all that is required to remedy the problem is to change the position of the spine by employing a lumbar support.

Contrast this with the dental practitioner. Most dentists prefer to work with a slight forward lean. If unsupported, a certain amount of muscle effort is required to maintain this lean for any length of time.

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AnterioRest mounts easily onto virtually any late model dental chair. A universal mounting system is available for chairs manufactured prior to 1995.

Preventing back pain with the AnterioRest chair attachment

You wouldn't lean backward all day without support...and yet, you probably lean forward for many hours each week, risking fatigue, pain and according to the author, possible tissue injury as well. The AnterioRest is a simple solution that mounts easily onto virtually any dental chair, allowing you to lean forward comfortably and with effective support.

"AnterioRest is designed to provide a stable, comfortable, adjustable support that the practitioner can fully lean on in their natural, desired treatment position," said Kurt Klemm PT, MDT, inventor of AnterioRest and author of this issue's installment of Your Health.

AnterioRest works on the same principle as your recliner, except it supports you from the front instead of the back. It not only allows you to lean in to treat patients healthily, but when you're in a standing position (such as during extractions), it also serves as a stabilization device for the upper body. It adjusts easily to support you from a wide range of angles. When not in use, AnterioRest folds neatly out of the way.

Not experiencing back pain? Help keep it that way by reducing your risk with AnterioRest. After all, prevention is always easier than the cure.

Installation is straightforward. Complete instructions are provided using basic tools, or simply contact your Benco Dental service tech for professional in-office installation.



To help prevent muscle pain and fatigue, AnterioRest effectively supports your body weight from the front, allowing you to lean comfortably toward the patient.

This slightly forward, inclined position used by many dental practitioners is not an unusual or damaging position for the spine. However, trying to hold that position via sustained muscle contraction is abnormal.

The damage

A static position requires sustained muscle contraction to maintain. This constant muscle contraction causes an increase in intramuscular pressure that compresses the blood vessels in the muscle, resulting in reduced nutrient and oxygen supply. Lactic acid accumulates, and fatigue and pain ensue. A static muscular effort can only be maintained for a short period of time before pain and tissue injury occurs.

We've all gotten sleepy while studying and leaned forward on the desk to rest. This position is not a problem because we were supported by the desk. If we had tried to maintain that forward position without actually touching the desk, that would have been a problem. It would have not only produced fatigue and pain but it certainly wouldn't have been restful.

Dentistry is no different. The forward incline position (posture) of the spine in the treatment position is not an inherently hurtful position. In my practice as a spine therapist I've seen numerous dental practitioners. All of them had muscle overuse problems. Certainly other etiologies may have also been a factor, but the overriding cause in my experience is muscle overuse. My patients' symptoms were alleviated with appropriate therapy, but their long term prognosis depends on the proper modification of their work environment to avoid the same problems in the future. This is simply a matter of providing support.

The solution

Using a device to support yourself as you lean forward allows your back muscles to rest. Research shows that both muscle activity and low back disc pressure increase with a forward lean position. However, research also indicates that low back muscle activity and disc pressure decreases when the trunk is supported from the front in this forward lean position. With decreased muscle activity there is an increase in blood supply to the tissue (decreased ischemia) leading to a healthier more comfortable back. ■