

Musculoskeletal Disorders (MSDs) Among Dentists



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"In the United States, the prevalence of musculoskeletal disorders (MSDs) among dentists is notably high due to repetitive stress disorder. Studies indicate that between 70% to 93% of dentists suffer from some form of musculoskeletal pain, primarily affecting the neck and back. The high rate of these disorders is attributed to prolonged static postures, repetitive movements, and inadequate ergonomic practices within dental offices.

To address these ergonomic challenges, Seiler's new 3D surgical microscope can play a crucial role. This advanced equipment allows dentists to maintain a neutral, ergonomic position while working, significantly reducing the strain on their neck and back. By enabling better posture and reducing the need for awkward angles and movements, the 3D microscope helps prevent the development of MSDs, thus preserving the dentist's career longevity and overall health."





- 1. What motivated you to purchase the 3D surgical microscope for your practice?
- I've always been interested in microscopy for surgery for the benefit or accuracy and precision and minimal invasiveness. Then when I found out I had a torn hip labrum from all the bending over to look at the palate, I realized it was time.
- 2. Has the 3D surgical microscope benefited you ergonomically compared to your previous setup? It's the natural body position that means everything for me. I was using loupes before, so although I could see closer, I still had to move myself into position to get a view of the surgical site. Now I move the scope instead of myself.



Dr. Puterman & the Seiler 3D Surgical Microscope

- 3. Could you describe the learning curve associated with using the 3D surgical microscope? How long did it take you to become proficient? It didn't take long at all for me, probably within a few surgeries to feel comfortable. It helps that I used it as much as I could so that I'd get used to it quickly.
- 4. **Do you feel that your work quality has improved since you started using the 3D surgical microscope? If so, in what ways?** Yes, just like going from no magnification to loupes increases work quality, this takes a similar leap. We can only do what we can see.
- 5. **Has the use of the 3D surgical microscope also improved the ergonomic conditions for your dental assistants? How so?** Yes, for sure. Before using it, my assistants would bend over trying to see in the patients mouth but typically unable to see much. Now they look at the screen, and of course still look in the mouth, but it's not because they're trying to see what I'm doing.
- 6. On a scale of 1 to 10, how important would you rate the 3D surgical microscope in your daily practice? It's definitely a 10. I have three of them and use it on every single patient I do surgery on.
- 7. How does the 3D surgical microscope compare to using traditional ergonomic loupes or a standard microscope in terms of comfort and effectiveness? I had little experience with a traditional scope in residency but when I started researching them, I always found it challenging to get comfortable when using one on the exhibit floor at a conference. You had to sit just right, not move and had to readjust whenever you look away. With the 3D scope, my posture is natural, I don't need to sit in a particular position.
- 8. Can you share any specific examples or cases where the 3D surgical microscope has made a significant difference in your work? With a traditional scope you don't have any peripheral vision and can't see your patient. Since I do a lot of IV sedation, that didn't make me comfortable. With the 3D scope I can see the entire surgical field and keep an eye on the patient while doing the surgery. I find it safer for sedation procedures.