

The Bar is Raised

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In a 2006 CRA survey, 86% of responding dentists reported that they were using magnification. Magnification has quietly become the de facto standard of care. This natural evolution is leading dentistry, albeit slowly, into the SOM era. The University of Washington School of Dentistry has proudly committed to train the graduating class of 2007 to be the first SOM proficient class of general dentists in US history. Other dental schools are rapidly falling in line.

One of the SOM's most important roles will be the dramatic rise in diagnostic sensitivity. For example, diagnosis of cracked teeth in this country has never evolved beyond the crude tests of ice pencils and biting on sticks. Cracked and fractured teeth are the third leading cause of tooth loss in industrialized nations.¹ Sev-

enty years ago, before the advent of radiographs, we diagnosed caries in the same manner. It is high time to diagnose early fractures in a presymptom manner. In the modern SOM-centered practice today, fractured cusps, split teeth, and crack-driven pulpitis can be virtually eliminated by virtue of periodic examinations done at 16 power. Misdiagnosis is also a concern; you are invited to visit my Web site at lifetime-dentistry.net for a clinical guide to visual diagnosis of early cracks.

Answers to the most commonly raised questions:

Q: How can you do restorative dentistry on a "wiggly" patient at high magnification when the depth of field is so small?

A: Two answers actually—first, my patients watch a monitor in real time, and when they squirm it ruins

the "movie" of the procedure, so they tend to hold still. Second, I spend a fair amount of time at 3x or 6x. I only use 12x or 16x for brief periods, then zoom right back to lower magnification. You don't need to drive a Maserati at 120 miles an hour all the time. Only sometimes.

Doesn't it slow you down?

First, no one should use a SOM clinically until you take a hands-on course. Doctors walk away from 1- or 2-day hands-on courses we present months or years ahead of those who learn strictly on patients. Second, don't forget how slow you were the first day you put on loupes. With a little patience and time you will be right back to speed. In some ways you will be faster, because you will make fewer mistakes and have fewer remakes.

Many of the techniques you see in dental journals are quite barbaric to teeth and peridontium when evaluated at high magnification. True biomimetics and minimally invasive dentistry will finally be realized when SOMs become routine for the majority of restorative dentists.

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Reference

1. Lynch CD, McConnell RJ. The cracked tooth syndrome. *J Can Dent Assoc.* 2002;68(8):470-5.