



## **Our Technology**

*At Myers Pediatric Dentistry & Orthodontics, we strive to keep up with the best new developments in dentistry and dental research that can benefit your child. Our mission is a practice full of cavity free kids, so we are always looking for technological advances that will help us reach that goal.*

**Air Abrasion.** Sort of like a sand blaster, this machine eliminates the vibration and noise of the drill. It is gentle enough to eliminate the need for numbing in many cases. It also is very conservative in tooth structure removal, cleaning the healthy tooth structure and removing only weak and undermined tooth structure. It is great for cleaning the tooth surface so all filling and sealant materials stick better and work longer.

**Carifree.** This is a new product in bacteria control. It tests for the amount of acid producing bacteria in a plaque sample, and it has a treatment protocol to establish a more healthy oral bacteria environment.

This is very helpful for teens and adults who struggle with cavities as well as for expectant and new moms who want to make sure they pass only good oral bacteria to their infant/toddler.

**Dental Laser.** This can be useful for children who are fearful of the sounds and vibrations of the dental drill. It can sometimes eliminate the need for numbing. It is also very gentle for soft tissue surgical procedures and promotes faster healing.

**Diagnodent.** This is a different kind of laser that shines a light deep into the chewing surface grooves of teeth and helps identify what is stain and what is cavity. The earlier a cavity can be detected, the smaller the filling (meaning the longer it will last), the less likely to need numbing, and the easier and faster it can be fixed.

**Motivational Interviewing (MI).** This technique comes out of behavioral research and deals with communication skills that allow partnering together for improved follow through and improved health.

**Orthodontic tools** (Krieger appliance and Damon brackets). We are continually looking for appliances that will affect growth and development, reducing the need for braces in the future. We also look for ways to reduce treatment time, increase patient comfort, and increase patient cooperation should braces become necessary.

**Sealants and filling materials.** We continually look for materials to allow more conservative placement, greater longevity, future cavity protection, and faster placement time. We feel that our sealant material is the best example of this philosophy in that it

goes on quickly, will outlast traditional sealants, and releases and recharges with fluoride to protect the tooth underneath and around the material. A sealant can now truly prevent a cavity and not just postpone a cavity on the chewing surface of a tooth.

**X-rays.** Our x-rays are digital for lower radiation exposure. We also have a machine that will give a full 3 dimensional rendering of the head with very low exposure. We can better plan our orthodontic care leading to faster treatment with better end results. Plus the 3D rendering of your skull looks really cool.

**Xylitol.** This is an all natural sugar substitute that is used in gum and candy. Xylitol can reduce the level of harmful bacteria in the mouth when used over time. Great for kids at risk for cavities and for expectant and new moms wanting to prevent passing harmful oral bacteria to their infant and toddler.

**FUTURE TECHNOLOGY** we are eyeing

- Biofeedback and EMG muscle awareness training for increased stability and shorter treatment time for braces
- Computer charting program
- Robotic bent orthodontic wires to radically reduce treatment times
- Web-based patient communication for better cooperation and coaching for parents of high cavity-risk children and better cooperation throughout the braces process.