



## SECTION 3

# NO DRILLING

**Figure 4.3** A child after having no-drilling air abrasion and ozone therapy for a cavity.



*Notice how stress-free my little patient is after having her first cavity treated with no-drilling, mercury-free dentistry. No novocaine shot, no drill, no mercury amalgam. Instead she got air abrasion, ozone and zirconia. Mother and grandmother are pretty pleased with themselves for their choice of dentistry for this child.*

A young mom came to me with a mouthful of mercury amalgam fillings. She was really upset when she found out the truth about how dangerous dental mercury amalgam is. She was a nursing student at the time, and she quickly grasped the oral-systemic concept and the risk mercury posed to systemic health. She understood the connection to higher rates of all types of chronic illnesses. Naturally, she was concerned, not only for herself, but for her family. When her young daughter got her first cavity, this mother made sure her daughter would never have to experience the drilling and filling with amalgam that she, her husband and her mother had experienced. All of which made visiting the dentist a dreaded experience.

This conscientious woman who was becoming a healthcare practitioner herself changed the long-term health outcomes for 3 generations of her family by changing her family's dentistry. Once she understood the risks, she was committed to take action. I was so proud of her, and proud to help her and her family create better oral-systemic health. Once she knew there was a mercury-free option, she chose that for her family.

First she had me remove all her mercury amalgam fillings, and when she was done with all four quadrants, she promptly brought in her husband. He had one of the worst cases of mercury fillings I had ever seen. I cannot imagine what the dentist who did the work was thinking. There were basically two rails of mercury amalgam running along all his molars, like railroad tracks. And the mercury amalgam was old and blackened with age. Listen to this [interview](#) with this couple during their transition to a mercury-free dentistry.

Next the woman brought in her mother, who had a mouthful of old mercury amalgam. The fillings were so big, many of her teeth had cracked, and dentists in the past gave her nickel-porcelain caps. Unfortunately, they had left mercury amalgam underneath the caps. It took some work, but I cleared all the mercury and nickel from her mouth and replaced it with biomimetic materials.

Next, the woman's young daughter came in for her very first dentist visit. She was going to get her first cavity treated. That day everyone had lots of fun in the office. Mother, daughter and grandmother all came in together. There were a lot of smiles that day, as the two women who had the 'drill it, fill it' dentistry, and who had to experience the vortex of consequences resulting from that outdated approach, witnessed the next generation get a whole new dentistry—one that was minimally-invasive, biomimetic, and systemic. This was a dentistry that would change the family pattern of lots of drilled teeth and lots of mercury fillings, and then later lots of cracked teeth that needed caps.

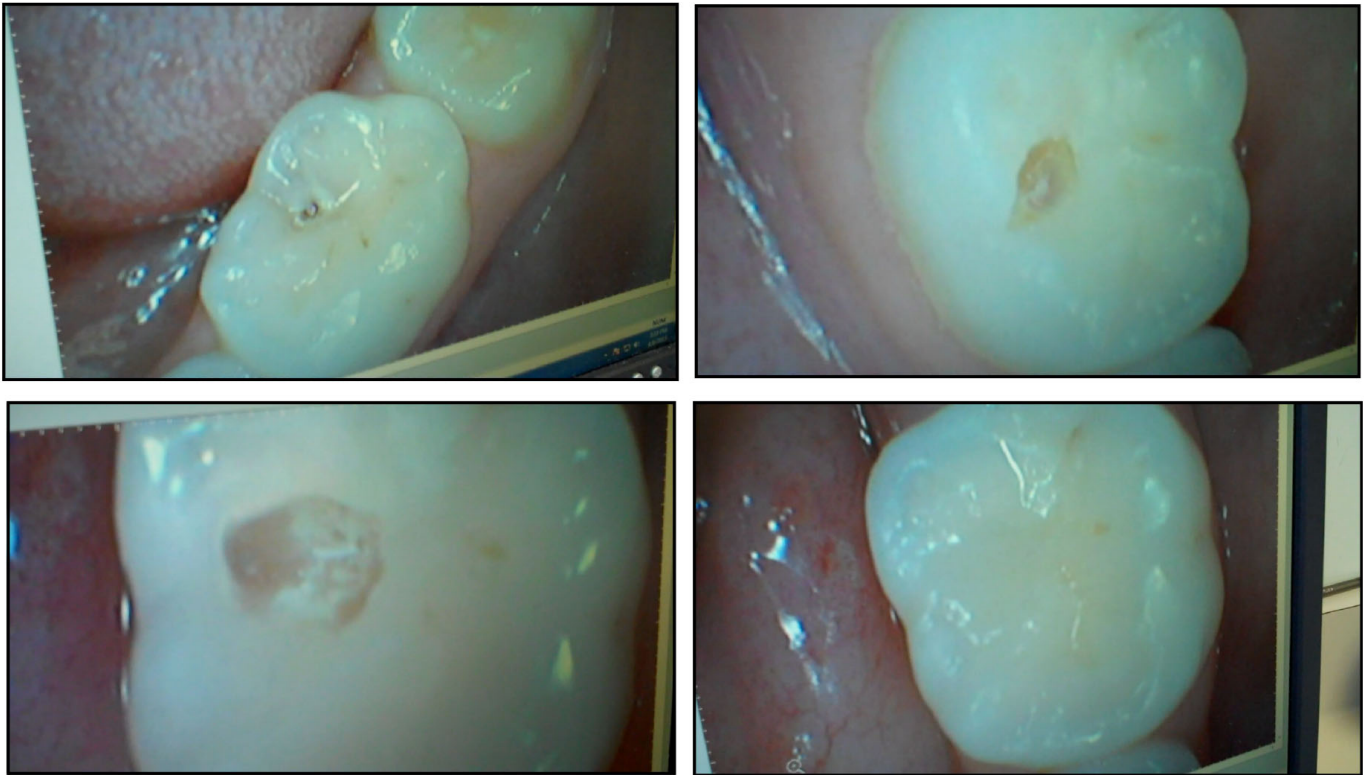
This lucky child had her first cavity treated the good way—with air abrasion, dental ozone, and a biomimetic zirconia filling. *No novocaine shot. No drilling. No toxic mercury amalgam.* And icing on the cake, this child is not going to hate going to the dentist. As long as she comes in every 6 months, I can catch any decay early and treat it, using safe, minimally-invasive methods. I can also do a reality check with parents on what might be causing tooth decay in the first place. After treating this child's very first cavity, the mother and I discussed improving her daughter's nutrition, including eliminating sugary treats and adding more minerals and good fats. There is no reason for her child to ever have another cavity if she's getting the nutrients she needs for healthy teeth and bones. There is no reason for her child to ever have her teeth drilled with a hot drill. And no reason for her to ever have mercury amalgam in her teeth from where it can disperse to other parts of her body.

## **NO-DRILLING METHOD**

When you know the structural damage done to teeth that are drilled, you want to avoid that at all cost. If you drill more than 2mm of enamel, the structural integrity of the tooth is damaged permanently. Drilling leads to fractures and eventually cracking that over the years can cause large areas of the teeth to be lost forever. Teeth that have been drilled tend to deteriorate over time. When you look at teeth that have been treated this way, you can see the damage. The teeth have areas missing, or have been drilled down to a nub to attach a cap. Everywhere a hot drill touches a tooth has a higher risk of recurrent decay and fractures over time.

No-drilling dentistry is a blessing. It allows treatment of cavities while minimizing damage to the natural tooth structure, and uses non-toxic biomimetic dental materials for safety. It offers patients and dentists a non-toxic and stressless treatment option. I begin with air abrasion using a custom-made pearl powder for the abrasive medium, reducing the risk of my patient breathing any toxic dust in the process of treatment. Air abrasion does not require a shot of novocaine. Air abrasion removes the area of decay without the high temperature of drilling. After the air abrasion treatment is complete, I then sterilize the area with ozone gas, applied with a disposable tube tip that fits around the area being treated. Ozone can oxidize .9 to 1.2 mm of decay. If a filling is necessary, I fill the area with biomimetic zirconia, using a blue light heat lamp to cure the new filling. And that's it. Simple, easy, stressless. In this case, my little patient never experienced any pain or distress.

Below you can see photos of 3 stages of a no-drilling, mercury-free treatment on a cavity on a molar. In the first image on the top, you see the untreated cavity. In the second image, you see the area after air abrasion. In the third image, you see the oxidized area after ozone therapy (to kill any caries left). And in the fourth image, you see the tooth with a small biomimetic zirconia filling that won't expand with heat or corrode over time.



In the next set of photographs starting on the next page, you can see what the no-drilling, mercury-free procedure looks like, step by step, as if you were in the room with us.

In the 1st image, you see me doing the air abrasion with pearl powder. You can see a vacuum suction on the top sucking up the abrasive medium while I hold the air abrasion tool in my right hand.

In the 2nd image, I use ozone therapy to kill the bacteria causing the decay. I am applying ozone gas with a tool that has a disposable cup that fits around the tooth.

In the 3rd image, I am holding an applicator tube of zirconia filling material that I will squeeze into the little hole where the cavity was.

In the 4th image, I cure the zirconia filling with a blue light lamp to set it permanently.

As you can see in the 5th image, mother and daughter are pretty pleased with their experience. I think the mother is even happier than her daughter because she understands the full implications of the new dentistry for her child. *No drilling, ever. Mercury free, forever. And no novocaine shot!* But more than all that, a reduced risk of chronic oral-systemic problems for her child's future.

