



What is Silver Diamine Fluoride?

The Samuels Sinclair Dental Center at Rhode Island Hospital has recently begun offering a new cavity treatment called Silver Diamine Fluoride. Silver Diamine Fluoride, or SDF, is an FDA approved liquid that can be used to treat cavities without an injection or drilling. This new treatment can be great for young children, special needs / medically compromised patients, or anyone fearful of dental treatment!

First, what is a cavity?

A cavity is a localized bacterial infection in a tooth, causing a hole, or “cavity”. Traditionally, dentists would need to drill out the infection and place a filling to restore the lost tooth structure. Now, with SDF, we can stop the infection instead of drilling it out.

What is the procedure?

The procedure is simple and painless. First, the teeth are cleaned with a toothbrush or polishing paste. Then, SDF is applied to the cavity with a small paintbrush. That’s it! We recommend no eating or drinking for 30 minutes. We repeat this procedure approximately three times, or until the cavity is fully healed. If the original cavity was large (if there is still a hole in the tooth) we can place a white filling over the healed cavity to restore the tooth to its original shape.

How does it work?

The two main ingredients in SDF are silver and fluoride. Silver has long been known to be a great antibacterial agent, killing bacteria and even preventing new bacterial growth. Fluoride is used daily in the dental field to help remineralize weakened tooth structure. Together, they are a one-two punch against cavities! SDF was recently FDA approved in the United States as a tooth desensitizer, but it has been used internationally for decades in countries such as Japan, China, Argentina, Australia, Brazil, and many others.

What are the downsides?

Fortunately, there are no documented adverse reactions to SDF. The most common side effect of SDF use is that as the infection is healing, the cavity will turn a dark color; that’s how we know it is working. SDF will only turn a cavity dark and will not discolor any healthy tooth structure. After the cavity is healed, we can place a white filling or sealant to mask any discoloration. If some SDF touches the gum tissue, it may turn a dark color, but this will go away in a few days. We do not recommend SDF for any patients with a silver allergy.

Why do we love SDF at the Samuels Sinclair Dental Center?

SDF is a novel treatment in the United States, and we are very excited to offer this as a treatment option to our patients. Let us know if you would like to see if you or your child is a candidate for SDF!