

Silver diamine fluoride in a general practice from the hygienist's perspective

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Let me shout from the rooftops that silver diamine fluoride (SDF) belongs in every dental practice.

Traditionally, SDF has been associated with pediatric patients and older adults who may benefit from delaying or avoiding extensive restorative treatment. While these populations continue to benefit greatly from SDF, its use should not stop there. Adult patients in general practices can also experience significant preventive benefits when SDF is incorporated into routine care.

As dental hygienists, we are uniquely positioned to identify areas at risk and advocate for preventive solutions before disease progresses. The CariedAway study¹ conducted by New York University demonstrated that SDF prevented approximately 81 percent of new carious lesions, highlighting its value as a powerful preventive agent.

In my mobile dental hygiene practice in Utah, I routinely apply SDF as part of a preventive strategy for patients at elevated caries risk. These high-risk areas include posterior interproximal areas, around crown margins, and on exposed root surfaces. These areas are often difficult for patients to clean effectively and are common sites for disease.

One of the biggest concerns surrounding SDF is staining. While it is true that SDF darkens demineralized or carious tooth structure, it does not stain healthy enamel when placed preventively. When applied interproximally, any discoloration is generally not visible to patients. On root surfaces used preventively, staining is often minimal or nonexistent. If staining does occur, it serves as an early indicator that a compromised area has been identified and treated before progressing into a larger restorative need. For most adult

patients, those lesions require a restoration to restore form and function so any staining will be covered with an esthetic restoration; once restored there will be no visible staining.

SDF can also be valuable for incipient lesions that are not yet ready for restorative intervention. Rather than simply monitoring these areas and waiting for progression, clinicians can actively manage the disease process with SDF. This approach aligns with modern minimally invasive dentistry and helps preserve tooth structure.

Another concern among dentists is whether SDF affects bond strength of a future restoration. Current evidence suggests that SDF does not significantly compromise bonding

to restorative materials when proper clinical protocols are followed.² This allows dentists to place future restorations with confidence when needed.

Furthermore, the antimicrobial properties of SDF may help reduce residual bacterial activity beneath restorations and support efforts to minimize recurrent caries after a restoration is placed.³ An example of this is amalgam fillings that contained silver had reduced recurrent caries compared to composite due to having silver in the material. For patients at high risk, this added layer of protection can be extremely valuable in aiding restorations to last longer as SDF lingers in the dental tubule.

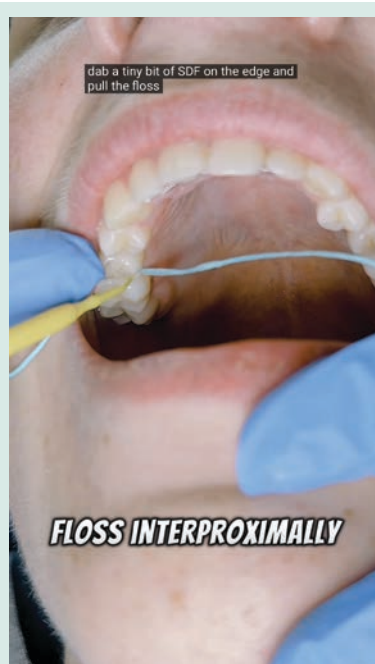
Successful implementation requires collaboration between hygienists and dentists. By educating patients, identifying appropriate candidates, and discussing the long term benefits of disease prevention, hygienists can play a leading role in expanding SDF use within general practice. The result is a more preventive, patient centered approach to care that benefits both the practice and the people it serves. **RDH**

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