Fact Sheet on Silver Diamine Fluoride in Arresting Dental Caries and its Use in Medicaid Populations

Contents

What is Silver Diamine Fluoride (SDF)?
How does it work?
How effective is SDF?
What are the benefits?
What are the side effects, risks and other considerations?
Can it be placed by a hygienist?
What is the proper CDT code for SDF?
How many states currently reimburse D1354 Caries Arresting Medicament (SDF)?
Fact Sheet on Silver Diamine Fluoride in Arresting Dental Caries and its Use in Medicaid Populations

1. What is Silver Diamine Fluoride (SDF)?

Silver diamine fluoride is an antimicrobial topical medicament used to slow down or arrest dental caries in both primary and permanent teeth. At this time, Advantage Arrest™ (Elevate Oral Care, L.L.C.) is the only commercially available SDF product in the U.S. It is cleared by the FDA as a medical device to treat dentin hypersensitivity and used “off label” to treat dental caries.

2. How does it work?

SDF is currently a colorless liquid applied directly on exposed carious dentin with a microbrush or other technique. Caries arrestment occurs through the free silver ion inactivation of bacterial metabolism and remineralization occurs through topical fluoride release.

3. How effective is SDF?

Limited clinical studies indicate that SDF is effective in 70% - 90% of treated teeth and reapplication at predetermined intervals increase effectiveness. Since SDF is not effective, however, in all teeth in all circumstances, follow-up evaluation by the dentist is necessary to determine when other interventions are indicated.

4. What are the benefits?

The benefits of SDF include its ease of application, effectiveness, low placement cost and avoidance of intense interventions such as administration of local anesthesia, pharmacologic sedative management, and protective restraint in very young and special needs populations.

5. What are the side effects, risks and other considerations?

SDF will turn carious dentinal lesions a dark black color. This may be a concern to patients or parents, especially in the anterior dentition. As with all procedures, an informed consent should be obtained containing this information and the risks/benefits/alternatives to SDF. If SDF comes in contact with the skin or oral mucosa, it will leave a temporary superficial stain or “tattoo” which will resolve in two to 14 days with the exfoliation of the superficial cell layer. Definite contraindication is a silver allergy. Relative contraindications include significant desquamative gingivitis, mucositis, or open mucosal lesion. Of concern is the potential assumption by the patient or parent that SDF is definitive care. Treated areas must be actively monitored by a dentist following SDF application.

6. Can it be placed by a hygienist?

This will depend on individual state scope-of-practice laws, but where allowable a dentist must have completed the diagnosis of incipient or mild/moderate caries, developed the treatment plan for the need for SDF, and be actively monitoring the patient to see if the carious lesion has arrested or is progressing and may require further
treatment. This is accomplished under the umbrella of a “dental home” to ensure patient care is appropriate, comprehensive, provides care in cases of emergencies, and can actively monitor and treat dental disease when indicated.

7. What is the proper CDT code for SDF?
   D1354 – interim caries arresting medicament application. Effective January 1, 2018, it should be recorded as a per tooth application.

8. How many states currently reimburse D1354 Caries Arresting Medicament (SDF)?
   An AAPD survey conducted in April 2017 determined 37% of state Medicaid dental plans currently reimburse for this procedure.