

Silver Diamine Fluoride

Background

Silver Diamine Fluoride (SDF) is a topical medicament cleared by the FDA as a Class II medical device to treat tooth hypersensitivity. Commonly, SDF (38% solution) has been used off-label to stabilize dental caries in children and adults. SDF is a brush-on liquid that prevents dental decay from progressing and spreading to other teeth. Unlike traditional treatments such as drilling and filling a cavity, SDF is quick, painless, and does not require local anesthesia or sedation.

Clinical Guidance

Indications and usage:

The following scenarios may be well-suited for the use SDF:

- High caries-risk patients with anterior or posterior active cavitated lesions.
- Cavitated caries lesions in individuals presenting with behavioral or medical management challenges.
- Patients with multiple cavitated caries lesions that may not all be treated in one visit.
- Difficult to treat cavitated dental caries lesions.
- Patients without access to or with difficulty accessing dental care.
- Active cavitated caries lesions with no clinical signs of pulp involvement

How to Apply Silver Diamine Fluoride

Materials

- SDF unit-dose ampule
- Gloves
- Gauze
- Disposable patient napkin
- Safety glasses for patients
- Vaseline
- Fluoride varnish

Application

- Place protective bib below patient's chin
- Wipe teeth with gauze or toothbrush to remove food or debris
- Dry the tooth/teeth being treated thoroughly
- Apply SDF to area of decay using a micro sponge applicator until area is saturated
- Allow area to absorb SDF liquid for 30-60 seconds
- Dab away excess liquid with gauze
- Apply fluoride varnish to all teeth including SDF treated area