Silver Diamine Fluoride (SDF)
Clinical Protocol for Arresting Dental Carious Lesions or Treating Tooth Sensitivity

Material: “Advantage Silver Arrest” (38% SDF, purified water) from Elevate Oral Care LLC.
Shelf life: 3 years unopened. Avoid freezing or extreme heat.

Indications:
1. Difficult to treat dental carious lesions.
2. Dental carious lesions in patients with extreme caries risk (Xerostomia).
3. Patients with carious lesions that may not all be treated in one visit.
4. Treatment challenged by behavioral or medical management.

Contraindications: Silver allergy, Ulcerative gingivitis, Stomatitis.

Considerations:
- SDF will likely cause a very dark stain in demineralized tooth surfaces.
- SDF may irritate the pulp, especially if the tooth is symptomatic. Nonetheless, when patients are numb SDF is used as an indirect and direct pulp capping agent.
- If contacted, SDF will cause reversible stain to skin (2-3 weeks) for patient or provider.
- SDF can permanently stain operatory surfaces and clothes.
- Use a secondary container for the SDF and only place on stable surfaces.
- A control restoration (e.g. GI via ART or other material) may be considered after SDF treatment.

Tray setup:
1. Plastic-lined cover for counter.
2. Large plastic bib for patient (endodontics style bib).
3. Two “2x2” cotton gauzes or cotton rolls.
4. 1 triple syringe tip.
5. Saliva ejector.
6. Cotton applicator (e.g. Qtip)
7. Petroleum jelly (e.g. vasoline).
8. 1 microbrush applicator
9. Dappen dish (glass or plastic, NOT metal).
10. 1 drop of SDF in a secondary container.

Procedure:
1. Put on standard Personal Protective Equipment (PPE) before handling SDF.
2. Ensure that the patient is wearing goggles and a large plastic patient bib.
3. Obtain 1 drop of SDF into the deep end of a dappen dish from the Dispensary.
4. Remove bulk saliva (e.g. saliva ejector).
5. Isolate tongue and cheek from affected teeth with cotton.
6. Apply petroleum jelly to gingiva near affected areas with a cotton applicator.
7. Dry affected tooth surfaces as well as possible with triple syringe, or if not feasible dry with cotton.
8. Bend the microbrush, immerse into the SDF, and remove excess on the side of the dappen dish.
9. Apply one drop directly onto the tooth surface with a microbrush.
11. Allow to absorb for 1 minute, then remove excess with cotton (2x2 or gauze).
13. Remind patient of no eating or drinking for 1 hour.
14. Re-application is usually recommended, monthly to annually until the cavity is restored or arrested.
15. Place gloves, cotton, and microbrushes into brown plastic “waste” bags, NOT the counter top trash.

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