

## Root of the Matter: SDF & Temporary Restorative Procedures

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According to the CDHBC Scope of Practice<sup>1</sup>, Registered Dental Hygienists (RDHs) in BC may apply anti-cariogenic agents and may place temporary restorations such as provisional prosthodontic restorations. As newer products and procedures are being introduced, the College would like to provide further information and clarification on those that are:

- Within the Dental Hygiene Scope of Practice
- Limited to a specific registration classification and population
- Not within the Dental Hygiene Scope of Practice



### Silver Diamine Fluoride – SDF

SDF is composed of high concentrations of fluoride which promotes remineralization and silver ions that act as antimicrobials.<sup>2,3</sup> Due to this combination, SDF arrests carious lesions by increasing mineral content, hardening the tooth structure, and reducing cariogenic biofilm.<sup>2</sup> Research supports the use of SDF in at risk populations such as children, the elderly, those with extreme caries risk, patients with special needs and dental phobias, and those with limited access to care.<sup>3</sup>

Silver Diamine Fluoride is **within** the Dental Hygiene Scope of Practice with a few considerations:<sup>2</sup>

- Informed consent, including communications for the benefits and risks (e.g., disadvantages including black staining);
- Collaborative approach with the dentist, and;
- When applied for the purpose of arresting a carious lesion, referral to a dentist is required to assess for any definitive permanent restorative needs.

For a more comprehensive overview of SDF, please review the article [Root of the Matter: Silver Diamine Fluoride](#) from ACCESS May 2017.

### Interim Stabilization Therapy – IST

IST is a temporary restorative procedure. The purpose is to arrest decay through a fluoride releasing glass ionomer cement (GIC).<sup>4</sup> This non-invasive procedure provides temporary relief and improved tooth integrity until a permanent restoration can be placed by a dentist.<sup>4</sup>

Interim Stabilization Therapy is within the Dental Hygiene Scope of Practice, however, **limited** to those registrants who hold 365-Day Rule Exempt registration. In order to provide IST, a dental hygienist must have specific education and training related to this therapy. Of note, IST is to be used for those vulnerable populations that do not have access to dental care.

As with all dental hygiene interventions informed consent is required. To obtain informed consent prior to performing IST, the dental hygienist must ensure that the client (or representative):<sup>4</sup>

- Understands the temporary nature of this intervention and the need to follow up imminently with a dentist, and;
- Agrees to have a written referral made directly to a dentist for follow-up care, or agrees to receive a written referral, which includes a list of dental contacts, and understands that it is the client's responsibility to follow up on the referral.

For more information, please review the [CDHBC Position Statement - Interim Stabilization Therapy \(IST\)](#) updated in May 2018.

### **Atraumatic Restorative Therapy – ART**

ART is a temporary restoration placed without the use of local anaesthesia.<sup>5,6</sup> To roughly prepare the lesion, hand instruments such as hand chisels and spoon excavators are used to remove enamel rods and soft caries, as opposed to a power driven handpiece.<sup>5,6,7</sup> A fluoride leaching glass ionomer is placed to fill and seal the site to prevent further caries progression.<sup>5</sup>

Atraumatic Restorative Therapy is **NOT** within the Dental Hygiene Scope of Practice, due to the removal of tooth structure.

### **Silver Modified Atraumatic Restorative Therapy – SMART**

SMART is a combination of atraumatic restorative therapy and silver diamine fluoride application. The process slightly differs from traditional ART as the preparation can involve not only hand instruments, but also power-driven handpieces or hard-tissue lasers.<sup>3</sup> SMART restorations provide the antimicrobial effects of SDF. In combination with GIC, remineralization occurs which is meant to improve the tooth integrity and enhances pulp vitality.<sup>8</sup>

Due to the removal of tooth structure, Silver Modified Atraumatic Restorative Therapy is **NOT** within the Dental Hygiene Scope of Practice.

### **References:**

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8. Alvear Fa B, Jew JA, Wong A, Young D. Silver Modified Atraumatic Restorative Technique (SMART): an alternative caries prevention tool. Stoma Edu J. 2016;3(2): 18-24. Available from: <http://www.stomaeduj.com/wp-content/uploads/2016/08/Art-ALVEAR-FA.pdf>