SECTION 1

ADVANTAGE DENTAL PREVENTION AND EVIDENCE-BASED DISEASE MANAGEMENT MANUAL

Caries Risk Assessment .................................................. 2
Chair side Caries Risk Assessment ........................................ 3
Chair side Caries Risk Protocol ............................................. 3
Betadine with Fluoride Varnish Set-Up and Application ................. 4
Silver Diamine Fluoride Set-Up and Application ........................ 5
SMART how-to (Silver Modified Atraumatic Restorative Treatment) ...... 6
Protocol reference list ....................................................... 7
ADVANTAGE DENTAL CARIES RISK ASSESSMENT

A Caries Risk Assessment assists the dental team in triaging the patient to appropriate care. The patient’s risk status and treatment plan are determined based on the answers to the caries risk questions. Below offers two visual examples to demonstrate which risk category a patient would fall, based on the answers to the caries risk questions. Make sure to document the information in the patient’s chart before moving on to the next question.

Example #1

<table>
<thead>
<tr>
<th>Are there existing signs of an infection?</th>
<th>High Risk</th>
<th>Moderate Risk</th>
<th>Low Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>YES</td>
<td>NO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Are there any current cavitated lesions?</td>
<td>YES</td>
<td></td>
<td>NO</td>
</tr>
<tr>
<td>Are there any visual changes in tooth structure?</td>
<td>YES</td>
<td></td>
<td>NO</td>
</tr>
<tr>
<td>Has the patient ever had a cavity?</td>
<td>YES</td>
<td></td>
<td>NO</td>
</tr>
</tbody>
</table>

Note: If the patient is under the age of two, you will need to review the caries experience of the primary caregiver and any applicable siblings. Ask the primary caregiver if they, their mother, or their grandmother have experienced dental problems. If applicable, ask if any of their children had decay before the child was four years old. Make sure to document the information in the patient’s chart before moving on to the next question.

Example #2

Are there existing signs of an infection or any current cavitated lesions?

- NO
- YES

Patient is HIGH RISK

Are there any visual changes in tooth structure or has the patient ever had a cavity?

- NO
- YES

Patient is LOW RISK

Patient is MODERATE RISK
ADVANTAGE DENTAL CARIES RISK ASSESSMENT

Based on the answers to the caries risk questions, you can determine the patient’s risk factor, which can be low, moderate or high as listed below.

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Guidelines</th>
</tr>
</thead>
</table>
| Low (CDT D0601) | - Annual exam with the provider, unless otherwise indicated by the provider.  
- "Pea" size application of fluoride toothpaste using toothbrush, twice daily. |
| Moderate (CDT D0602) | - Annual exam with the provider, unless otherwise indicated by the provider.  
- "Pea" size application of fluoride toothpaste using toothbrush, twice daily.  
- Twice-annual application of Silver Diamine Fluoride to the occlusal surfaces of posterior teeth for preventative treatment of future lesions (D1208). |
| High (CDT D0603) | - Annual exam with the provider, unless otherwise indicated by the provider.  
- "Pea" size application of fluoride toothpaste using toothbrush, twice daily.  
- Apply Silver Diamine Fluoride (D1354) and/or Silver Modified Atraumatic Restorative Treatment (D1354 & D2940), SMART technique, if necessary, to stabilize the cavitated lesions until definitive care can be provided.  
- Apply sealant to the permanent molars, if indicated.  
- Twice-annual application of Silver Diamine Fluoride to the occlusal surfaces of posterior teeth for preventative treatment of future lesions (D1208).  
- Apply PVP Iodine and Fluoride varnish every 6 months alternating Silver Diamine Fluoride (D1206). |

Pregnant And Special Health Care Needs Patients (in addition to the above):  
- Xylitol 6-10gm/day: Mints, slowly dissolve 4 mints 3x a day, or Gum, chew 2 pieces for 5 minutes 3x a day.
BETADINE WITH FLUORIDE VARNISH:
SET-UP AND APPLICATION

This document will review the set-up and steps to apply Betadine with Fluoride Varnish. You may also review the video “Betadine with Fluoride Varnish Set-Up and Application” for additional information and video demonstration.

Tray Set Up

The following items should be set prior to seating the patient.
- Fluoride Varnish
- 2 x 2 cotton gauze
- Cotton rolls
- Dappen dish with a drop of Betadine
- Cotton tip applicator
- Disposable mirror

Application Steps

Before starting treatment, make sure the patient is wearing protective eyewear. Always wear gloves and protect the patient’s clothing with a bib. Follow the steps below to apply Betadine with Fluoride Varnish.

1. Dry the tooth structure with the 2 x 2 cotton gauze.
2. Soak up the Betadine using the cotton tip applicator and paint it on the tooth structure.
3. Use a 2 x 2 cotton gauze to wipe off excess betadine from the tooth structure.
4. Apply the Fluoride Varnish over the tooth structure and have the patient swallow.
SILVER DIAMINE FLUORIDE:
SET-UP AND APPLICATION

This document will review the set-up and steps to apply Silver Diamine Fluoride (SDF). You may also review the video “Silver Diamine Fluoride Set-Up and Application” for additional information and video demonstration, available in the Catalog section of Advantage University.

Equipment

- 2 x 2 cotton gauze
- Air water spray/cup of water
- Applicator brushes
- Cotton rolls
- Cotton tip applicators
- Disposable dappen dishes
- Disposable mirror
- Fluoride Varnish (FV)
- Gloves
- Headlamp
- Instrument Tray
- Masks
- Moult mouth prop
- Patient napkins
- Patient protective eyewear
- Silver Diamine Fluoride (SDF)
- Super floss
- Vaseline

Application Steps

Before starting treatment, make sure the patient is wearing protective eyewear. SDF will stain areas it comes into contact with, so always wear gloves, protect the patient’s clothing with a bib, and make sure to properly isolate the tooth, only getting SDF on the tooth/teeth needing treatment. Follow the steps below to apply SDF.

1. Apply Vaseline to the lips and gingiva to keep SDF from staining these areas.
   - If tissue staining occurs, explain to the patient that it is temporary and will wear off naturally in a few days.
2. Apply cotton around the tooth/teeth to isolate and keep them dry.
3. Dry the tooth/teeth using air or 2 x 2 cotton gauze. Make sure to remove all saliva from the caries.
   - The tiny fluoride ions in SDF cannot penetrate through any amount of saliva in a caries lesion, therefore, dry, dry, dry! Without paying close attention to this step, you will not succeed in arresting caries.
4. Dip the applicator brush in SDF and rub onto the tooth/teeth; make sure SDF only gets into the caries lesion(s).
   - For interproximal lesions: Completely dry the affected interproximal space and then draw a piece of Super floss between the teeth. Using the applicator brush, put a drop of SDF on the floss either buccally or lingually and then draw the floss interproximally stretching it to release the SDF into the interproximal lesion(s). Hold everything in place for one minute to allow the SDF to soak into the tooth.
5. Apply Vaseline or FV over area between the tooth/teeth to prevent salivary dilution and to mask the taste of SDF.
6. Remove cotton from mouth and dismiss the patient with instructions not to eat or drink for one (1) hour and to return for two (2) additional SDF application appointments.
   - Two additional SDF application appointments are necessary to completely arrest the caries lesion(s).
SMART TECHNIQUE: GENERAL OVERVIEW

This document will review the set-up and steps for the SMART Technique (Silver Modified Automatic Restorative Treatment), which combines Silver Diamine Fluoride (SDF) and Glass Ionomer (GI). You may also review the video “SMART Technique” for additional information and video demonstration, available in the Catalog section of Advantage University.

Equipment

- 2 x 2 cotton gauze
- Air water spray/cup of water
- Applicator brushes
- Cotton rolls
- Cotton tip applicators
- Disposable dappen dishes
- Disposable mirror
- Dry angles
- Explorer
- Fluoride Varnish (FV)
- Cotton roll holders (R/L)
- Glass Ionomer Capsules (GI) and applicator
- Gloves
- Headlamp
- Instrument Tray
- Large/small fuzzy tip applicators
- Masks
- Moult mouth prop
- Patient napkin
- Patient protective eyewear
- Silver Diamine Fluoride (SDF)
- Super floss
- Triturator
- Vaseline

Application Steps

Before starting treatment, add one drop of SDF in a dappen dish. Make sure the patient is wearing protective eyewear. SDF will stain areas it comes into contact with, so always wear gloves, protect the patient’s clothing with a bib, and make sure to properly isolate the tooth, only getting SDF on the tooth needing treatment.

1. Apply Vaseline to the lips and gingiva to keep SDF from staining these areas.
2. Apply cotton around the tooth/teeth to isolate and keep them dry.
3. Dry the tooth/teeth using air or 2 x 2 cotton gauze. Make sure to remove all saliva from the caries.
4. Dip the applicator brush in SDF and rub onto the tooth/teeth; make sure SDF only gets into the caries lesion(s).
5. Allow SDF to soak into the tooth for one minute.
6. Place the GI capsule in the triturator, run for 10 seconds, and then place the capsule in the applicator.
7. Apply GI over the tooth to add a layer of protection and isolate the SDF application.
8. Condense the GI into any defect or groove and trim the excess.
9. After 3-4 minutes, remove cotton from mouth and rinse off the tooth using water.
10. Apply FV over the tooth to add a layer of protection and mask the taste of SDF and GI.
11. Instruct the patient to not eat or drink anything for one hour and only each soft foods for the next 24-hours.

COMING SOON
Documents detailing specific SMART techniques such as, “Ideal SMART Steps for Occlusal Lesion” “Ideal SMART Steps for Class II Lesions”
ADVANTAGE DENTAL PROTOCOL REFERENCE LIST

PREGNANT WOMEN


http://depts.washington.edu/nacrohd/sites/default/files/oral_health_pregnancy_0.pdf

SILVER DIAMINE FLUORIDE

UCSF Protocol for Caries Arrest Using Silver Diamine Fluoride: Rationale, Indications and Consent
Jeremy A. Horst, DDS, PhD; Hellene Ellenikiotis, DDS; and Peter L. Milgrom, DDS. CDA JOURNAL, VOL 44, No 1

Silver Diamine Fluoride: A Caries “Silver-Fluoride Bullet”
A. Rosenblatt, T.C.M. Stamford and R. Niederman
J DENT RES 2009 88: 116

Randomized clinical trial on arresting dental root caries through silver diammine fluoride applications in community-dwelling elders

Clinical Trials of Silver Diamine Fluoride in Arresting Caries among Children: A Systematic Review
JDR Clinical & Translational Research; Vol. XX • Issue X

Silver Diamine Fluoride: A Review and Current Applications
Shalin Shah, Vijay Bhaskar, Karthik Venkatraghavan, Prashant Choudhary, Ganesh M., Krishna Trivedi
Journal of Advanced Oral Research/Jan-Apr 2014 /Vol. 5 No.1

XYLITOL


Effect of xylitol on an in vitro model of oral biofilm.

Effect of maternal use of chewing gums containing xylitol,


An examination of the advances in science and technology of prevention of tooth decay in young children since the Surgeon General's Report on Oral Health.


PVP IODINE


Prevention-centered caries management strategies during critical periods in early childhood.


Milgrom, Peter M.1; Tut, Ohnmar K.2; Mancl, Lloyd A.3 Journal of Dentistry for Children, Volume 78, Number 3, September/December 2011 , pp. 143-147(5)


CARIES RISK ASSESSMENT


Knee-to-Knee exam for the Pediatric Patient