

Eastman Dental Hospital

Silver Diamine Fluoride (SDF)

Paediatric Dentistry

If you need a large print, audio, braille, easy read, age-friendly or translated copy of this document, please ask at reception. We will try our best to meet your needs.

1 Introduction

This is a leaflet written for families with children who have dental decay. It describes the benefits and risks of silver diamine fluoride (SDF) application.

2 What is silver diamine fluoride?

Silver diamine fluoride is a liquid that releases silver and fluoride ions over time.

3 How can silver diamine fluoride help?

Silver diamine fluoride can be used to prevent dental decay and seal the tooth surface by painting it on. This may allow us to avoid providing more extensive treatment such as fillings or extractions for your child.

4 What are the risks of silver diamine fluoride?

All treatments and procedures have risks, the risks related to use of SDF are:

- The area of the tooth with dental decay will stain black permanently. It is possible to replace this stained area with a filling or crown later
- Tooth coloured fillings or crowns may discolour if the SDF touches them. This can normally be polished off. However the join between the tooth and a filling may keep the colour.
- If SDF is accidentally applied to the skin or gums, a brown or white stain may appear. This is not harmful and will disappear over several weeks

5 What will happen if I choose not to have silver diamine fluoride placed on my child's teeth?

If you choose not to have silver diamine fluoride then we will offer an alternative treatment for your child. This may not be as effective.

6 What alternatives are available?

The main alternative therapy is fluoride varnish for preventing caries. Otherwise alternatives include nothing (which will probably lead to the dental decay getting worse) or fillings or extractions.

7 How should I prepare my child for silver diamine fluoride?

No special preparations are required for SDF placement. Please attend with your child as you would do for any normal appointment.

8 Asking for your consent

We want to involve you in all the decisions about your child's care and treatment. If you decide to go ahead with the treatment, by law we must ask you to sign a consent form. This confirms that you agree for your child to have the procedure and understand what it involves. Staff will explain all the risks, benefits and alternatives before they ask you to sign a consent form. If you are unsure about any aspect of the proposed treatment, please don't hesitate to speak with a senior member of staff again.

9 What happens during application of SDF?

We will use some cotton wool or gauze to push the cheek or lips out of the way. We might also put some petroleum jelly on the gum as well. Then after drying the decayed part of the tooth we will paint the SDF on. This is left on for a minute then rinsed with water.

10 What should I expect after SDF treatment?

The affected area will turn black. Your child will be reviewed by us to check that the decay has been stopped. We might reapply the SDF every 6 months.

12 References

Horst JA, Ellenikiotis H, Milgrom PM. UCSF Protocol for Caries Arrest Using Silver Diamine Fluoride: Rationale, Indications, and Consent. J Calif Dent Assoc. 2016 January ; 44(1): 16–28

First published: 3/7/18

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