

IPP PREVENTION CARE PATHWAY 3-6

VISIT 1

1) Discuss reasons for incorporation into the scheme

Do you know why you are on the Prevention programme and what it is?

The IPP Prevention Programme is aimed at helping you to reduce your tooth decay. So we will be working with you to help you to do this.

You are on the Prevention Programme because you have been assessed by your Dentist at our Practice as having tooth decay.

2) Caries risk assessment

We need to ask you some questions to find out how susceptible you are to developing tooth decay - then we will know if there are things we can help you to change to make you healthier.

- Ask the Questions in the CARIES RISK ASSESSMENT
- Score the child as low/ med / high caries risk
- Advise where changes can be made and how

3) Use the IPP PLAQUE SCORE

Divide into sextants and score 4, 6, 8, 10, OUT OF 10.

Assessing Plaque Levels

Assessing and recording levels of visible plaque at each examination, and sharing this information with the child and their parent/carer, will help reinforce the importance of effective tooth brushing.

An example of a quick method of recording plaque levels, and presenting the information in terms the child will understand, is to give marks out of 10 as follows:

10/10 perfectly clean tooth

8/10 Plaque at the cervical margin crown covered

6/10- Plaque up to the cervical 1/3

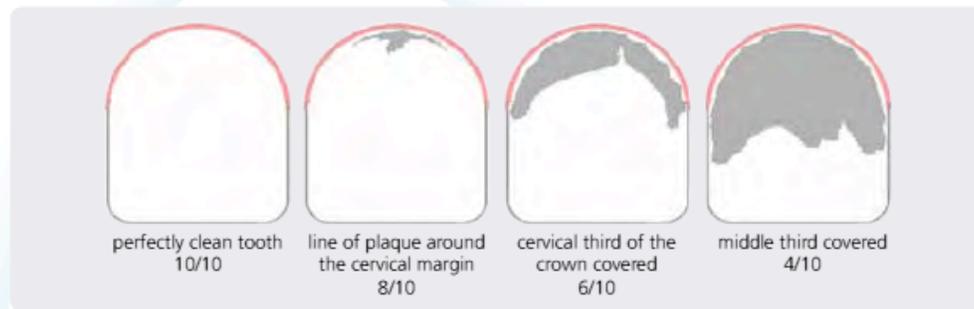
4/10 middle third covered

Record the worst score in each sextant, for example:

8/10 6/10 8/10
8/10 6/10 8/10

3.4.6 Assessing Plaque Levels

Assessing and recording levels of visible plaque at each examination, and sharing this information with the child and their parent/carer, will help reinforce the importance of effective toothbrushing. An example of a quick method of recording plaque levels, and presenting the information in terms the child will understand, is to give marks out of 10 as follows:



Record the worst score in each sextant, for example:

8/10	6/10	8/10
8/10	6/10	8/10

<http://www.sdcep.org.uk/published-guidance/caries-in-children/>

4) Tooth brushing advice

- Ask many times do they brush each day?
- Ask how long they brush for?
- Ask what tooth paste they use?
- Simple advice given
- Brush twice daily - once last thing at night and once more during the day - if possible in the morning
- Brush for at least 2 mins
- Brushing should be supervised.
- Use F toothpaste - at least 1,000ppm and advise 1350-1500ppm.
- Use only a smear - 0-3.
- Use only a pea sized volume of paste - 3-6
- Use a small headed brush
- Spit don't rinse.

5) Diet advice IPP1

Simple advice

Reduce amount and frequency of sugars

Avoid sugar containing food and drinks at bed time

Use sugar free meds where appropriate

Provide a diet sheet OR suggest parent/guardian photographs all food consumed for three days

Ask child to bring in the diet record for IPP2 and also bring in their tooth brush and tooth paste.

6) **Apply F.V as per the guidelines.**

Check FV is on IPP Treatment plan.

Application of Fluoride Varnish in-line with Childsmile Guidelines

(Childsmile Staff Programme manual updated July 2016)

Pre-application instructions:

These instruction could be written and/or verbal:

- Advise patient on the purpose, benefits, process, possible side effects and answer any queries.
- Recommend the patient eats and drinks normally before attending.
- Advise that if the patient is taking Fluoride supplements they should not be taken for 2 days after the fluoride varnish application. After that continue as directed.
- Advise that patient's teeth may appear discoloured temporarily after Fluoride Varnish application and not to brush until the following morning.

Duraphat Varnish application can be undertaken:

- By a dentist or under the prescription of a dentist by a dental therapist, dental hygienist, or an IPP extended duties dental nurse currently registered with the General Dental Council.

The dose of Fluoride varnish (Duraphat Varnish 50mg/ml Dental Suspension 2.26% (22,600 ppm) Sodium Fluoride) for children is:

- 0.25ml per child aged 3, 4 or 5 years of age.
- 0.4ml per child aged 6 years or older

Consent and Medical History

- The IPP extended duties dental nurse (EDDN) should be familiar with the 'Childsmile protocol and application of Duraphat varnish to children aged 2 years and over' and have signed it
- Check that you have valid consent for the application
- Check that you have a valid prescription for the fluoride varnish application. Check medical history with the parent, specifically check for allergy to sticking plaster or severe allergy or asthma that has required hospitalization
- If there are any changes to the medical history or concern regarding consent refer back to the dentist.

Preparation

- Place your equipment so that it is accessible for yourself but away from the child.
- Dispense 0.25ml of Duraphat Fluoride varnish and ensure that the remaining varnish remains inaccessible to the child.
- Welcome the child and explain the procedure in simple terms.
- Ensure you and the child are comfortable and the child is wearing safety glasses and bib.
- Apply your own safety glasses, and follow local hand hygiene protocols.

Risk assessment

The extra-oral assessment:

- Check the skin of the face and around the mouth for abnormalities (spot, inflammation, swelling etc.).
- Check the lips for lesions/infections.

The intra-oral assessment:

- Check the inner cheeks and the inside of the lips.
- Check the upper and lower surfaces of the tongue.

Children showing obvious signs of systemic illness (e.g. colds/flu) or any abnormality of the face, lips or soft tissues of the mouth should be excluded on the day from fluoride varnish application.

- Check the teeth and gums in a systematic order for signs of decay and/or infection.

If everything appears normal the fluoride varnish may be applied. If the child has signs of decay the fluoride varnish may be applied as it may help protect from further decay and it will acclimatize the patient to dental treatment. However, fluoride varnish should not be applied to exposed pulps, in case it is uncomfortable.

Application procedure

A systematic approach is more important than adopting a specific order or technique. However, the following represents one method, which could be followed. If a child gets upset or protests during any part of the procedure, then the procedure should be abandoned.

- Gently retract the cheek with your finger or mirror and dry the upper right canine and molars with a cotton wool roll.
- Place the cotton roll in the upper right buccal sulcus.
- Holding the roll in place, apply a small amount of fluoride varnish to the buccal, palatal, approximal, and occlusal surfaces of the molars.
- Remove the cotton roll.
- Retract the upper lip with a finger. Dry the incisor teeth with a cotton roll.
- Apply varnish to the buccal, palatal and approximal surfaces of the canines and incisors.
- Repeat for upper left.
- Repeat process for whole lower arch.
- If there is insufficient varnish for full lower arch give priority to buccal, approximal and occlusal surfaces of molars on both sides of the mouth.
- Ensure all equipment is removed from the mouth. Count four cotton rolls, one brush, gloves, and one mirror and place all disposable equipment in the clinical waste bag.
- Complete patient record including **audit IPP form**
- If any immediate allergic reaction, remove product by toothbrushing and rinsing and following local protocol. Complete and submit a yellow BNF card as per local procedure.

Adverse reactions/side effects

In subjects with a tendency to allergic reactions, oedematous swelling of the oral mucosa has been observed in exceptional cases especially after extensive application. If necessary the Duraphat layer can be easily removed from the mouth by brushing and rinsing. Ulcerative gingivitis and stomatitis have been reported by sensitive individuals.

In rare cases, asthma attacks may occur in patients who have bronchial asthma. In patients with gastric sensitivity, retching may exceptionally occur after a high dosage and extensive application.

Overdose

The toxic dose of fluoride ingestion is estimated at 5mg/kg child body weight. (The dose of 0.25ml Duraphat contains 5.6mg fluoride.)

Acute fluoride toxicity in small amounts causes stomach irritation, nausea and vomiting. In very high amounts/quantities, fluoride can cause serious systemic toxic signs and symptoms including the possibility of death.

Fluoride is very quickly absorbed from the stomach; a child suspected of swallowing excessive levels of Duraphat should be given a glass of milk to drink and then quickly transferred to the local A and E department for assessment.

Post application instructions

Ensure that all patient details have been recorded. Each child should be given an aftercare instruction leaflet.

- Advise the patient not to eat or drink for 30 minutes following the procedure.
- Advise to eat soft food for the rest of the day.
- Advise that teeth should not be brushed that day but toothbrushing with fluoride toothpaste should resume the following morning.
- Advise that if the patient is taking Fluoride supplements they should not be taken for 2 days after the fluoride varnish application. After that continue as directed.
- Advise that the patient's teeth may appear discoloured temporarily.
- The dental chair should be cleaned with a detergent wipe and the application area left clean and tidy.

The Collapsed Child protocol

Duraphat when applied at the correct dose, is not normally associated with any adverse reactions. Every child in the programme would have had a question asked regarding asthma and a history of allergies.

In addition children in the **IPP programme** will have had their medical history taken and updated at each appointment. Children that have severe asthma or allergies, categorised by a serious hospital admission for either asthma, allergies or certain allergies such as colophony, will initially be excluded from Duraphat application and will be referred to the dentist for full assessment.

EDDNs are required to undertake basic life support training in their local area. Paediatric life support training should also be considered.

In the unlikely event of an adverse reaction, the protocol for dealing with a child who collapses whilst undergoing treatment is:

- Stop the procedure immediately and summon help from the rest of the dental team.
- Send someone to call 999 and note the time
- Remove all equipment from the vicinity of the child
- Put the child in the recovery position, ensuring that the chin is elevated.
- Make sure a member of the team keeps all other children safe and away from the incident.

Each dental practice will have its own protocol for collapse and all employees working in the dental practice should be trained to follow this.

The EDDN is responsible for assessing the possible risk to the patient of continuing with an **IPP session** particularly fluoride application in the absence of a trained person who is able to deal with medical emergencies. They should ensure that the GDC principles are met namely:

- At least 2 people are always available to deal with medical emergencies when treatment is planned to take place.
- All members of staff (not just the registered team members) know their role if a patient collapses or there is another kind of dental emergency.
- All members of staff who might be involved in dealing with a medical emergency are trained and prepared to deal with such an emergency at any time, and practice together in a simulated emergency so that they know exactly what to do.

If the decision is to proceed, an “open door” policy should be adopted. This should be carried out as follows:

- The EDDN should inform the receptionist that they are seeing a patient and family member, and let them know which room will be used. The room should be within calling distance of another member of staff member AT ALL TIMES.
- The door should be kept open at all times when the family is with the EDDN

Reporting adverse reactions protocol

If there are any adverse reactions to the fluoride varnish (e.g. mucositis, allergy etc.) remove product by toothbrushing and rinsing and follow local protocol. Complete and submit a BNF yellow card as per local procedure. The yellow card system is described below. This is the system used for any adverse reaction to any medicine in the BNF. The web address is <http://yellowcard.mhra.gov.uk/>

NHS Education for Scotland (NES) in conjunction with the Yellow Card Centre Scotland has developed six e-learning modules to support healthcare professionals in identifying and reporting Adverse Drug reactions (ADRs).

The adverse reaction may be noticed immediately by the dental team or later by the parents. The parents may ring the dental practice. It is unlikely that the dentist will be informed in the first instance but the EDDN in the dental practice is more likely to be informed. It is good practice to inform the dentist who prescribed the fluoride varnish in the dental practice.

Preparation for visit 2:

- Distribute diet sheet or alternatively ask the patient's parent/guardian to photograph all food and drink that the patient consumes over a 2-3 day period
- Ask patient to bring in own toothbrush and toothpaste for demonstration next visit

<http://www.child-smile.org.uk/professionals/fluoridevarnish1app.aspx>

VISIT 2

1) Plaque score undertaken and compared with V1 plaque score

2) Reinforce oral hygiene advice

Tooth Brushing Instruction:

- Check the child's tooth brush small enough head?
- How many times each day does the child brush?
-At least twice per day last thing at night and at least one other occasion (DBOH)
- How long does the child brush for each day?- Ideally 2 minutes
- What toothpaste does the child use? – Reinforce at least 1000ppm F ideally 1350-1500ppm F. Reinforce the 'spit don't rinse philosophy' (DBOH)
- Advice systematic brushing, cleaning all of the surfaces, demonstrate the Modified Bass technique using the models
- Patient should have brought own toothbrush and toothpaste and demonstrate to the IPP provider their brushing technique

Demonstrate modified bass brushing

How to Brush

Modified Bass brushing technique:

- Hold the head of the toothbrush horizontally against your teeth with the bristles part-way on the gums
- Tilt the brush head to about a 45-degree angle, so the bristles are pointing under the gum line.
- Move the toothbrush in very short horizontal strokes so the tips of the bristles stay in one place, but the head of the brush waggles back and forth. Or use tiny circular motions. This allows the bristles to slide gently under the gum. Do this for about 20 strokes. This assures that adequate time will be spent cleaning away as much plaque as possible. Note: this is a very gentle motion. In healthy gums, this should cause no pain. Brushing too vigorously or with large strokes can damage gum tissue.
- Roll or flick the brush so that the bristles move out from under the gum toward the biting edge of the tooth. This helps move the plaque out from under the gum line.
- Repeat for every tooth, so that all tooth surfaces and gum lines are cleaned.
- For the insides of your front teeth, where the horizontal brush position is cumbersome, hold the brush vertically instead. Again, use gentle back and forth brushing action and finish with a roll or flick of the brush toward the biting edge.
- To clean the biting or chewing surfaces of the teeth, hold the brush so the bristles are straight down on the flat surface of the molars.
- Gently move the brush back and forth or in tiny circles to clean the entire surface. Move to a new tooth or area until all teeth are cleaned.

ASK THE PATIENT TO BRUSH WITH THEIR OWN TB – OBSERVE AND ADVISE RE TECHNIQUE AND TIME.

Provide personalized diet advice

Work through the diet diary / food photographic diary and establish:

- the number of intakes of food and drinks per day
- the number of intakes that contain added sugars and how many were consumed between normal mealtimes
- Whether any intakes containing sugars were taken within one hour of bedtime (when the caries protective effects of saliva are reduced)
- Ensure meds are sugar free.

Describe advised sugar intakes:

3-6 years – no more than 19g or 5 cubes of sugar

7-10 years – no more than 24g or 6 cubes of sugar

11+ years – no more than 30 g or 7 cubes of sugar

Demonstrate and Discuss sugar swaps and the sugar app. Discuss the EatWell plate

<https://www.nhs.uk/sugar-smart/sugar-facts#top>

<https://itunes.apple.com/gb/app/change4life-sugar-swaps/id1015850256?mt=8>

VISIT 3 (for pathways 3-6 and 6-16, not GA pathways)

- 1) Plaque free score- compare this score – has it improved – discuss
- 2) IF LOW IMPROVEMENT – TBI UNDERTAKEN.
- 3) Reinforce diet changes recommended in Visit 2 and enquire about risks of erosion if appropriate (6-16 pathways)
- 4) F.V. Application as per guidelines (please see visit 1)

IPP PREVENTION CARE PATHWAY 6-16

As 3-6 except:

IPP 6-16 CARIES AND GA 6-16 Visit 1

Enquire whether additional fluoride measures have been prescribed

Ask the parent/guardian of the child if they have been prescribed any high F M/W or toothpaste?

Where caries is present / orthodontic appliances/dry mouth, other predisposing factors or those with special needs (DBOH):

- Those children aged 8 years upwards with active caries the dentist should prescribe Fluoride mouthrinse daily (0.05%NaF) for use during an different time to brushing (DBOH)
- For those aged 10 years plus with active caries the dentist should prescribe 2800ppm Fluoride toothpaste (DBOH)

IF NOT - ASK GDP TO PRESCRIBE