

Managing Tooth Decay in Children

Information for parents



This leaflet provides information about the management of tooth decay in children.

What is tooth decay?

Tooth decay occurs when dietary sugars and the bacteria on teeth form a sticky film on the surface of the tooth called plaque. The bacteria in plaque produce acids which weaken the tooth and can cause it to become decayed.

How does tooth decay develop?

Tooth decay begins on the outer layer of the tooth (enamel). If left untreated, the decay will extend to the inner layer of the tooth (dentine), which may lead to sensitivity or pain. There is a risk of severe pain, abscess, and facial swelling if the decay progresses to the nerve inside the tooth (pulp).

Preventing tooth decay

There are things that can be done at home, and by the dentist, to prevent tooth decay from developing:

- Adopting a healthy diet
- Brushing teeth twice a day, using a fluoride-containing toothpaste
- Visiting the dentist regularly for professional interventions.

Further information on preventing tooth decay can be found in the following leaflets: ***Keeping Your (Child's) Teeth Healthy*** for 0-9 year olds and for 10-16 year olds.

Treatment Options for Tooth Decay

Teeth that are decayed can be treated by either the biological or conventional approach.

Biological Approach

This approach involves stopping or slowing the progression of tooth decay until the baby tooth falls out naturally. This can be used where tooth decay has not yet progressed to the nerve inside the tooth. The dentist will advise if this is suitable for your child. There are two main techniques used for baby teeth.

Metal Crown

A metal crown can be used to treat baby molar teeth that have small amounts of decay or have not formed properly. They are silver in appearance and seal the tooth to protect it from further decay or breakdown. They are placed using the 'Hall Technique'.

- If teeth are very close together, a plastic band (a separator) is placed between teeth to create enough space for the crown. They are left in place for up to two weeks.
- At the next appointment, the plastic band is removed, and a crown of the right size is chosen.
- The crown is pressed directly over the tooth, and cemented in place, without any tooth removal or numbing required.



Placement of a metal crown following use of a separator

The metal crown protects the tooth until it falls out naturally. After placement, the tooth may feel uncomfortable to bite on for up to two weeks. If this is causing a lot of discomfort, pain relief (such as paracetamol) can be given.

Your child may develop a slight gap between the top and bottom front teeth. This should resolve after four weeks.

Silver Diamine Fluoride (SDF)

SDF is a liquid that can be applied to baby teeth to stop the progression of decay. SDF hardens tooth decay, which will turn it black. In conjunction with good oral hygiene and diet, SDF can save teeth.

Further information on SDF can be found in the following leaflet available in the Paediatric Dentistry Department: ***Silver Diamine Fluoride (SDF) Liquid Treatment.***



Conventional Approach

Sometimes it is more appropriate to remove all of the decay from a tooth. This is a technique that dentists have been using for hundreds of years.

For baby teeth, either a filling or pulp therapy may be used as described on the next page.

For adult teeth, pulp therapy is usually called root canal treatment. A separate leaflet is available for this: ***Root Canal Treatment for Your Child - What Does it Mean?***



Fillings

If the decay has not reached the nerve of the tooth, it can be managed with a filling material. This involves the following steps:

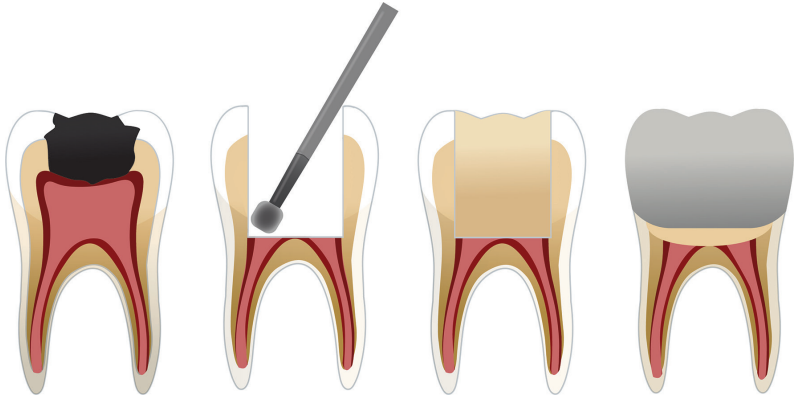
- The tooth is made numb with numbing gel and a local anaesthetic injection to prevent discomfort
- A protective tooth cover called a rubber dam is placed over the tooth to protect the rest of your child's mouth and to keep the affected tooth as clean and dry as possible
- The area of decay is cleaned, leaving behind an open cavity
- The cavity is filled with an appropriate material. This is usually tooth-coloured.



A child having a filling carried out

Pulp Therapy

If the area of decay is deep, the infected part of the pulp can be removed and a material placed over this. This is called a pulpotomy. A metal crown is then placed to prevent further decay, and to make the tooth strong enough to allow eating.



The stages involved in completing a pulpotomy

Extraction

If a tooth is very badly decayed, and/or there are signs and symptoms of infection, it is better to extract the tooth.

Will Tooth Extraction Hurt?

During treatment, the tooth is made numb with numbing gel and a local anaesthetic injection. The tooth is then wobbled out. Your child may feel pressure during this, but there should be no pain.

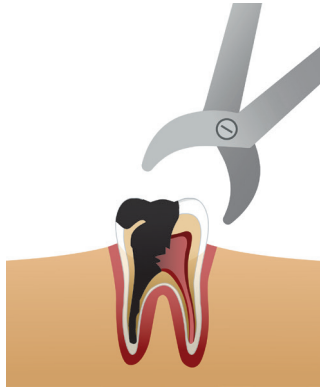


Diagram showing a tooth requiring an extraction

Once the numbness has worn off, the site of extraction may feel tender. This is usually eased with pain relief medication. Occasionally, the extraction site may develop an infection. If this occurs, contact Leeds Dental Institute (on the contact numbers detailed overleaf) or your family dentist for an appointment during normal hours.

In summary, there are many ways of managing tooth decay, and there are several factors that influence which approach is taken. The dentist will outline the appropriate options available, and will answer any questions you may have.

Contact Numbers

Leeds Dental Institute Paediatric Dental Clinic
open 9am-5pm Monday-Friday.

Paediatric Dental Reception: **(0113) 343 6229**
Paediatric Dental Booking Team: **(0113) 343 5711**
Leeds Dental Institute Switchboard: **(0113) 244 0111**

Out of Hours

Contact your family dentist who may be able to see you out of hours, or call the NHS 111 helpline to schedule an emergency dental appointment.

Attend your local Accident and Emergency Department if there is spreading infection, fever, facial swelling or difficulty breathing.



What did you think of your care?

Scan the QR code or visit bit.ly/nhsleedsfft

Your views matter



© The Leeds Teaching Hospitals NHS Trust • 1st edition Ver 1
Developed by: Mehul Jivanji, Specialty Dentist in Paediatric Dentistry,
Leeds Dental Institute
Produced by: Medical Illustration Services • MID code: 20230308_012/NR

LN005597
Publication date
01/2024
Review date
01/2027