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Molar Incisor Hypomineralisation (MIH)

Patient Information Leaflet

This leaflet explains more about Molar Incisor Hypomineralisation (MIH).

If you have any further questions, please speak to the dentist looking after your child.

What is MIH?

MIH is a condition where the outer layer of teeth (the enamel) is softer than usual. This can cause the affected teeth to appear chalky white, yellow and / or brown and to be extra sensitive (e.g. to cold things, when tooth brushing) and more prone to dental decay.

It typically affects the first adult molars (six year molars) and the adult front teeth (incisors). This is why it is not normally noticed until the age of six to seven years. Up to 20% of children in the UK are affected by MIH.

What causes it?

The exact cause of MIH is not known but it is understood to relate to disturbance in tooth development around the time of birth and / or during the first few years of life. A traumatic birth period, childhood illness and high fevers have been found to be associated with it.

What does MIH look like?



Teeth may appear chalky white/
yellow/ brown



Teeth may crumble
away

Teeth may be sensitive and
painful

How do I know if my child has MIH?

Your child may have complained about pain / sensitivity from these teeth. You may also have noticed them being discoloured. Regular check-ups with your dentist can help spot conditions such as MIH from an early age. We will conduct a full examination and may carry out further tests, take x-rays and ask you a few questions to help diagnose MIH.

How do you treat MIH?

Treatment depends on many different factors including the severity of the condition. Sensitive, painful, broken down and / or decaying teeth will benefit from treatment.

Your dentist will discuss these options with you but below is a brief summary of the options available:

Front teeth (Incisors):

Treatment may be carried out to improve the appearance as well as sensitivity of these teeth.

- **Fluoride varnish:** Involves a fluoride paste being painted onto the tooth. This dries clear and can help reduce sensitivity
- **Whitening:** This aims to reduce the contrast of the discoloured part of the tooth to the adjacent sound teeth. It can cause sensitivity and sometimes irritate the gum temporarily.
- **Micro abrasion:** This option uses a rough acidic polishing paste to remove the outer, discoloured layer of the tooth. It can cause some damage to the tooth.
- **Resin Infiltration:** This tries to minimise the discolouration of the tooth by changing how it reflects light.

- **Composite filling:** This involves a thin layer of white filling material being placed on top of the tooth. This fills any irregularities on the tooth surface as well as masking the colour. These fillings can chip and discolour, so they need regular care and maintenance from your dentist

Back teeth (Molars):

Affected molars may be more likely to break down due to the heavy load they take in being the 'grinder' teeth.

For the treatment of back teeth with MIH, we often have to consider how broken down they are and how likely they are to last in your child's mouth. Options include:

- **Fissure sealant:** Sealants are applied to the grooves of the teeth and makes them easier to clean as well as protecting them. This is suitable for mildly affected teeth.
- **Stabilisation or composite filling:** This involves a temporary or permanent white filling being placed on the tooth. This can help reduce the irregularities of the tooth surface and minimise sensitivity
- **Stainless steel crowns:** A silver coloured cap is placed on the tooth. This is often used for more broken down teeth and can help keep a tooth in the mouth if further treatment options need to be considered
- **Extraction:** This involves removing the tooth from the mouth. Extractions are considered if the tooth is severely broken down and has a poor lifespan. If done at the correct time, the adult tooth behind can erupt into the space this tooth once occupied.

What can I do?

Follow the advice of your dentist regarding tooth brushing and dietary habits. They may recommend a special tooth paste and / or use of a mouthwash. They may encourage you to see them more often to have a fluoride varnish applied to the teeth to strengthen them against tooth decay and reduce sensitivity.

What now?

We will discuss all appropriate treatment options with you and encourage you to ask any questions you may have. We often seek the opinion of other specialist dentists to ensure we are continuing to provide your child with a high standard of care.

The contents of this leaflet have been adapted for use with permission from the Department of Paediatric Dentistry at Guy's & St Thomas' NHS Trust.

Contact us

If you have any questions or concerns about MIH, please contact the paediatric dental team on 020 8672 1255 (Monday to Friday, 9am to 5pm).

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you on-the-spot advice and information when you have comments or concerns about our services or the care you have received. You can visit the PALS office between 9.30am and 4.30pm, Monday to Friday in the main corridor between Grosvenor and Lanesborough wings (near the lift foyer).

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS Choices

NHS Choices provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health.

Web: www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones.

Tel: 111

AccessAble

You can download accessibility guides for all of our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk).

The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.



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