



CASE STUDY

A smarter way to brush – bringing about behavioural change in an adult

Case history

At a routine appointment, it was discovered that Dominika needed a filling. As a teenager, Dominika had had a brace and had always been very conscientious about oral hygiene, but as an adult she had lapsed back into bad habits. Although she had always brushed her teeth regularly with a manual toothbrush, it was clear she had not been brushing slowly or methodically enough. Classified as a Red Patient, Dominika needed to demonstrate some improvements in her oral healthcare before a full treatment programme could be implemented.

What is a Red Patient?

A patient is classified as 'red' when there is a high risk of dental disease. Oral health problems have been identified by a dental professional, and they need urgent attention. A red classification will mean that it is necessary that the patient is seen again quickly – ideally within seven days – because there are important oral healthcare issues that need to be addressed. Initially the patient spends time with the Oral Health Education team. The team discusses the patient's oral hygiene regime in detail and makes sure the patient understands what constitutes 'best practice'. This includes simple things like how to use the toothbrush and areas of the mouth that may be missed when cleaning.

The team provides advice and support, so the patient can take control of improving their oral hygiene to a point where a course of treatment can take place. The team will also provide ongoing support and advice to reduce the likelihood of the patient ever needing invasive treatment, like fillings and extractions, in the future.

This is a new and better focus for dentists, because prevention is better than cure. So, spending time and resources improving oral healthcare and preventing patients needing expensive clinical treatments is a far better use of NHS budgets.

Patient's Perspective

How do you feel about your teeth?

The appearance of my teeth has always been really important to me. I was really shocked to discover I needed a filling and felt quite upset about it.

What happened after you were told you needed a filling?

My dentist Dr Ben Atkins explained that the decay needed removing and filling. However, I needed to spend some time with Adrian in the Oral Healthcare Education team first, to see how I could improve my dental healthcare before having any treatment carried out.

Were you given anything to help you improve your brushing?

Adrian explained how disclosing gel is a useful tool in preventing tooth decay, as it encourages comprehensive cleaning. He then showed me how to clean my teeth properly using an electric toothbrush.

What difference have you noticed?

I was sure an electric toothbrush would be good for my teeth, but I hadn't realised how important it is to use it properly to make it effective. Once Adrian showed me how to use it properly, I felt what clean teeth should feel like for the first time.

So, when you went back for your next appointment was everything fine?

No. There was improvement as a result of cleaning my teeth more effectively, but I'd been struggling to get in between my teeth to remove bits of food. I'm not keen on flossing, and when the Oral Healthcare team showed me the best way to do it, it was obvious I hadn't been doing it properly. Many people don't like to floss, so we also discussed how to use interdental brushes, which I found much easier. Hopefully at my next visit, I'll have made a significant improvement through using the interdental brushes as well.



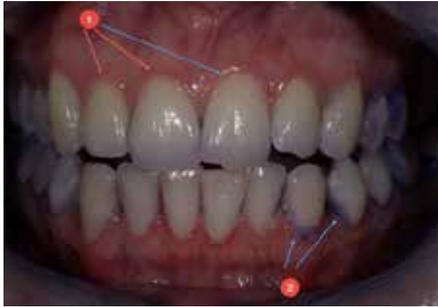
Technical knowledge

Patients like Dominika have an appointment with the Oral Healthcare Education team when remedial treatment is required, but where a clinical assessment indicates that they can improve their own oral healthcare first by taking a few simple steps. Once this improvement has been demonstrated, then the treatment plan can be implemented. This process is in line with the latest NHS Guidelines, aimed at better prevention leading to less invasive treatments, like fillings, root canal treatments or even extractions.

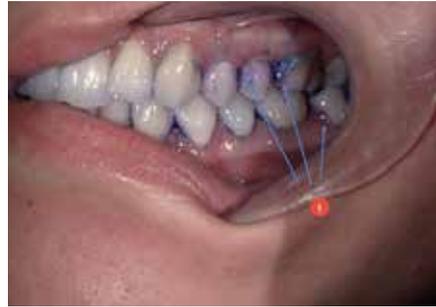
Dominika had disclosing gel applied, which demonstrates where she was missing brushing. The images show the teeth near the site of the filling are blue, indicating that she was missing this area. The Oral Healthcare Education

team showed Dominika how to use an electric toothbrush properly, something which many users are unaware of, assuming the brush just somehow 'does it right'. They also identified an issue around flossing, which is an equally important part of having good oral hygiene.

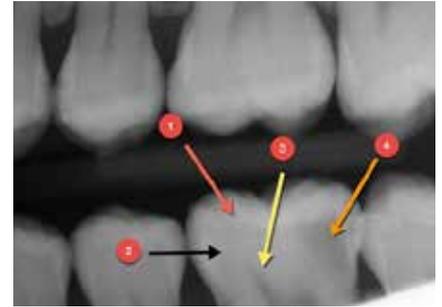
These images reflect Dominika's teeth and gums before her new regime commenced:



Dominka's teeth and gums before her new regime commenced



Back of the mouth



Dominika's radiograph

What can patients look for in their mouths:

1. Dominika's gums were nice and pink at the front of her mouth
2. The area of concern was the blue stained area, where plaque had been missed. This was not a huge problem at the front of the mouth.

At the back of the mouth, this was a different issue. The plaque built up between the back teeth was stained blue with the disclosing tablets.

You can see from a radiograph Enamel (**1 on the outside of the tooth**), Dentine the creamier area on the tooth (**2**) a nerve inside the tooth (**3**) and the resulting hole (**4**) from the build-up of plaque.

Dominika's second visit to the Oral Healthcare team, which reinforced her new brushing technique with the use of interdental brushes, showed that a significant behavioural change had taken place. Dominika's oral health showed real improvement. The single decay lesion has now been filled with a white filling and no further causes for concern have been detected, demonstrating a positive patient outcome.

Tips on oral healthcare

What to look out for!

Regularly check your gums. They should be pink, with an even tone throughout the mouth. If the area above one of the teeth is red and swollen, an infection may be the cause. Keep your eyes open for bleeding gums, which, along with bad breath, can be a sign of early stage gum disease or gingivitis. It is caused by a build-up of plaque on the teeth. Plaque is a sticky substance that contains bacteria.

Some bacteria in plaque are harmless, but some are harmful for the health of your gums. If you don't remove plaque from your teeth by brushing them, it builds up and irritates your gums. This can lead to redness with bleeding, swelling and soreness.

Look out for signs of tooth decay such as a dull white band on the tooth surface closest to the gum line. This is the first sign and can often remain undetected. Also, a yellow, brown or black band on the tooth surface closest to the gum line will indicate that the decay is getting worse. Finally, teeth that look like brownish-black stumps means that you have advanced decay.

If you are suddenly aware of hot or cold food being painful, or it starts to hurt when you chew or bite; these can also be signs that a trip to the dentist is necessary.

Remember - The basics are easy.

- Make sure you brush your teeth twice a day for two minutes with a fluoride toothpaste
- Spit don't rinse after cleaning. Rinsing removes the fluoride you have just placed on your teeth, increasing the decay rate by approximately 20%. If you must rinse, then use an alcohol-free fluoride mouth rinse.
- Keep your sugar intake low and look out for the hidden sugars in things like dried fruit and smoothies
- Try fresh fruit, cheese and milk; rather than dried fruit, fizzy drinks and sugar based foods
- Sugar free gum can help with your oral hygiene

There are also plenty of resources to help you.

Several recent models of electric toothbrushes combine with a Smartphone App, which acts as an aid to better teeth cleaning and oral healthcare.

But if these are too expensive, then Free Apps like **Brush DJ** are also designed to help young and old enjoy 'brush-time' and clean more effectively.

Another helpful App, which advises on the Sugar, Fat and Salt content of most groceries is **Food Smart**. It works by scanning the bar code on food packaging and quickly gives you a red / amber / green score to help you choose healthier options in the weekly shop.

Also, we have diet sheets on our website which you can use to track your food intake over three days. If you show it to your dentist, they can advise if there are particular items that are very bad for your teeth. For example, foods like dried fruit and smoothies are often promoted as being a healthy option, but they contain very high concentrations of sugars.