

Whitening in under-18s

Kiran Shankla presents a transformative whitening case of a 10-year-old child, which revealed a compassionate approach to safeguarding both smiles and mental wellbeing.

A 10-year-old patient was externally referred to the practice to see if I could help with her discolouration (fig 1-3).

At the initial meeting, the patient was very shy and reserved and lacked the confidence to speak without looking at the floor.

Before carrying out any examination, a detailed history was taken from the patient's mother to help establish a diagnosis for the discolouration. The following questions were asked and answered:

- At what age did you notice changes to the teeth? As soon as the teeth erupted
- How many teeth are involved? Only the front upper four teeth
- Did you have any issues pre/peri/postnatal? The patient was born six weeks premature and was a twin. Her twin brother also suffered from discolouration.
- Do you think the discolourations are getting worse or the same? The white spots have stayed the same, but there is now more brown pigmentation.
- Does the presence of these discolourations impact your child's life? Yes, my daughter is getting severely bullied at school, which has caused her to become very self-conscious and upset, which is having a significant impact on her mental health.
- Have you had any dental treatment prior to today? No, my current dentist



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Fig 1, 2 and 3. Initial presentation.



Fig 2.



Fig 3.



Fig 4 and 5. After two weeks of bleaching.



has said the only option was to drill tooth tissue or wait until I am 18 to have veneers placed.

It is very important to ask specific questions to help diagnose and identify the best treatment options as spots that have been present since birth are more challenging to treat than those that appear later in life.

It is also extremely important to understand the physical and mental effects associated with discolouration and the emotional effect on a child resulting from delayed treatment of the discolouration.

Examination/test results

An intraoral examination should then take place. When carrying out an intraoral exam for whitening, the following areas should be assessed:

- Dark teeth – If any teeth are darker than the surrounding teeth, a peri-apical radiograph should be taken to establish the cause (such as post RCT treatment/calcific metamorphosis).
- Recession defects – Patients should be informed these areas will not change colour.
- Signs of bruxism – These patients are much more likely to suffer from

sensitivity during whitening, so they must be pre-warned.

- Oral hygiene – This must be optimum before starting whitening to get the best results.

- The number of deciduous/adult teeth present – If treatment is being carried out before all adult teeth are present, the patient must be informed that they will require future whitening to allow the newly erupted teeth to match the teeth which have been whitened.

In this case, a diagnosis of localised fluorosis was made.

Treatment options:

1) Monitor – As the patient was getting bullied for her teeth this was not a viable option.

2) Whitening – The only non-invasive option for the treatment of tooth discolouration.

3) Whitening + Icon – A combination technique to help camouflage and remove discolouration.

4) Composite bonding – Would require drilling of the natural tooth tissue.

The treatment options for this case were discussed in detail with the patient and mother. Currently, the whitening of teeth in under 18-year-olds is illegal in the UK. The GDC states “Products containing or releasing between 0.1 per cent and six per cent hydrogen peroxide cannot be used on any person under 18 years of age except where such use is intended wholly to treat or prevent disease.”

Given the patient was being severely bullied at school and she fulfilled the GDC’s criteria of whitening under 18 years old, a decision was made to whiten the teeth, followed by a round of Icon Infiltration to seal the porosities.

Treatment plan/timeline/expected outcomes:

The following treatment plan was made:

- 1) Oral hygiene instructions and scaling with a dental hygienist
- 2) 3D scan to construct upper and lower whitening trays
- 3) At-home whitening carried out for two weeks using 10 per cent carbamide peroxide - Pola Night (figs 4 and 5).



Fig 6, 7 and 8. Post-op images.



Fig 7.



Fig 8.

4) Icon Infiltration to seal the porosities

Results, conclusion and summary points

The patient carried out at-home bleaching for two weeks. She reported minimal sensitivity and got on well with the whitening trays. Pola Night is my whitening of choice due to being fluoride-releasing and having a high water content, minimising sensitivity, and having a neutral pH.

As you can see from the images,

a great result was achieved with the whitening alone. A round of Icon Infiltration was carried out after to remove any white spots (fig 6-8).

As professionals, we have a duty of care to provide the best possible treatment while protecting teeth from unnecessary harm. Young patients who suffer from discolouration are always very motivated when whitening, and the physical and mental changes of this simple treatment plan are life changing.

References available on request.