

Confidence to smile

Nadeem Younis presents a composite restoration case



Figure 1: Unaesthetic appearance of patient's smile



Figure 2: Discolouration and incisal wear of the upper central incisors



Figures 3 and 4: The canines were prominent and rotated bucco-distally



A female patient in her 20s came in for a consultation as she lacked the confidence to smile because she was unhappy with the unaesthetic appearance of her anterior teeth (Figure 1).

The examination revealed discolouration and wear of the upper central incisors. The upper left lateral incisor also had both distal and mesial secondary caries. The canines were prominent and rotated bucco-distally (Figures 2, 3 and 4).

Radiographs revealed satisfactory root canal treatments on the upper right lateral incisor and the upper left central incisor. There was a periapical radiolucency associated with the upper right central incisor as well as evidence of calculus present interdentally (Figures 5, 6 and 7).

In order to resolve the periapical pathology and the periodontal health, I advised root canal treatment of the upper right central incisor and subgingival debridement to restore the periodontal health. Following the endodontic treatment, the root canals of the central incisors and the upper right lateral incisor were sealed with glass ionomer cement.

Options

Once the first phase of the treatment was completed and the periodontal health was restored, several options for addressing the appearance of the anterior teeth were discussed with the patient. Orthodontics could be used to align the upper canines in the arch and an inside/outside bleaching



Figure 5: UL1 and UL2 pre-op



Figure 6: UR1 and UR2 pre-op



Figure 7: UR1 and UL1 pre-op

technique would whiten the discoloured teeth.

The patient had the choice of two different methods for restoration of the upper anterior teeth. The first option was to use composite, the second was to have ceramic crowns or veneers, with or without aesthetic posts. The patient was very nervous and apprehensive about having any extensive dental treatment. She decided to go for bleaching and the restoration of the teeth with composite due to its minimally invasive approach. If there is a relapse of colour in the future due to the tooth whitening, the composite can be resurfaced or repaired with a more opaque colour.

The treatment

The inside/outside bleaching technique was carried out for one week and a dressing was placed palatally for a period of two weeks (Figures 8 and 9). The palatal access cavities of the anterior teeth were restored with Venus Pearl Opaque Bleach (OB) using phosphoric acid etch and iBond Total Etch adhesive. I prefer to use this because it has a high bond strength to enamel and dentine, and it is easy to apply.



Figure 8: Sealed root canals with GIC for inside/outside bleaching



Figure 9: Two weeks post-bleaching, before definitive restoration

Labially, the anterior teeth were restored with Venus Pearl OB and B1 composite to establish correct form and shape. I have found that Venus Pearl OB composite is ideal to mask out minor tooth discolouration. It blends well with the overlying composite without the opaque layer shining through, which can often make the restoration look unnatural.

Venus Pearl is easy to apply, there is no slump and it does not stick to the instruments. The consistency of the composite is neither too hard nor too soft. It can be manipulated with relative ease using a brush or a flat plastic. The polishability is good and a shiny surface is achievable with minimal effort.

The restorations were polished with a Venus Supra Polishing kit, alumina impregnated pastes and a buff wheel (Figures 10, 11 and 12). The patient was delighted with the end result (Figure 13). She enthused: 'Now all I do is smile. I am full of confidence.'



Nadeem Younis has a special interest in aesthetic and orthodontic dentistry. He runs hands-on composite courses for general dental practitioners and accepts case referrals. Nadeem is a full member of the British Academy of Aesthetic Dentistry and is a partner in Bridge Dental Practice, Burnley, Lancashire. He qualified from Sheffield University in 1993.



Figure 10: Right side of definitive restorations



Figure 11: Front view of definitive restorations



Figure 12: Left side of definitive restorations

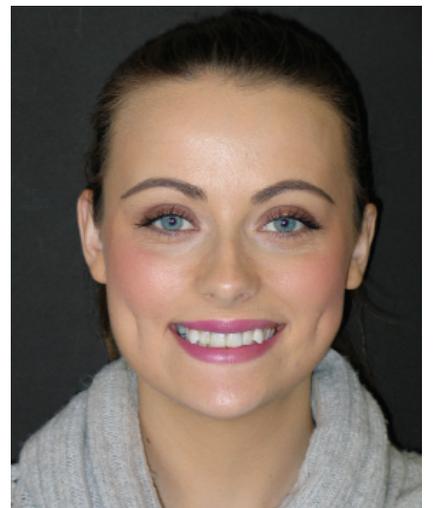


Figure 13: The patient was delighted with the end result