

Happy with naturallooking restoration

Dr Nishan Dixit describes a direct dental bonding case with fissure tints which restored teeth to a natural appearance

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Composite resin restorations within general dentistry are constantly evolving in terms of application and quality of outcome. The new standard of materials and techniques results in increasing levels of predictability and longevity. The following case explains and illustrates how contemporary methods of application and use of appropriate shades create a natural result. It demonstrates how we are now able to mimic nature better than ever before, even in a general practice environment.

A 38-year-old male presented at the practice, as a new patient. He was experiencing pain on the right hand side of his mouth when consuming sweet foods and drink (Figure 1). His medical history revealed that he had an allergy to nickel, otherwise he was medically fit and well. He was a non-smoker and didn't drink alcohol. His past dental attendance, however, had been irregular. The last visit he had made to a dentist had been two to three years ago.



Figure 1: A 38-year-old male was experiencing pain on the right hand side of his mouth when consuming sweet foods and drink

Figure 2: A general examination revealed the presence of multiple cavities and his teeth were heavily stained from drinking tea and coffee



Figure 3: The UR6 had a failing, leaking amalgam and secondary caries. Decay was also present on the distal aspect of the UR5







Figure 4: Venus Color Choco tint was used to recreate the fissure pattern and to match the other discoloured teeth

Figure 5: The patient was happy with the natural-looking result

A general examination revealed the presence of multiple cavities and his teeth were heavily stained from drinking tea and coffee (Figure 2). The UR6 had a failing, leaking amalgam and secondary caries. Decay was also present on the distal aspect of the UR5 (Figure 3), and was only evident radiographically.

Restorative options were discussed with the patient and composite restoration was recommended as an ideal treatment option. Composite would create a natural look and adapt perfectly to the colour of the surrounding teeth. My choice of composite for this case was Kulzer Venus Pearl.

After placement of rubber dam, the old amalgam and caries were removed from the UR6. Caries were also removed from the UR5, which resulted in a distal occlusal (DO) cavity. A sectional matrix system was placed on the UR5 to ensure tight contacts. Both teeth were etched with 37% phosphoric acid. They were bonded with Kulzer iBond Universal, using a selective-etch technique in accordance with the manufacturer's instructions. I find that iBond is easy to apply and produces no sensitivity.

Superior handling properties

Venus Pearl composite was placed with a layered approach using the opaque light chromatic (OLC) and the A1 shades. Finally, Venus Color Choco tint was used to recreate the fissure pattern and to match the other discoloured teeth (Figure 4).

I have used the Venus range of composites exclusively for a number of years, due to their superior handling properties and outstanding results. I chose to use Venus Pearl for this case, because it gives high aesthetic

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outcomes, providing excellent colour adaptation, wear resistance and a natural finish. The material employs the same tricyclodecane urethane dimethacrylate resin as Venus Diamond, which is unique to Kulzer. Compared with earlier technologies, the cured composite is more flexible under stress and more durable over time.

Once fully cured, both the composite restorations were polished using the Kulzer Venus Supra polishing kit which gives a long-lasting, glossy shine with minimal material abrasion. Secondary polishing was completed with aluminium oxide paste and a felt-coated polishing point, which gives the restoration an extremely high lustre.

Conclusions

I was pleased that the damaged tooth tissue could be restored by mimicking nature as closely as possible. The patient was also happy with the natural-looking result (Figure 5), and that he was now pain free. **D**

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