

An Artistic Way to Fix a Fracture

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The conservative restoration of a large anterior fracture in a young patient is an extremely important procedure in any general dental practice. Ideally, the composite restoration should replicate the tooth as it existed before the fracture. To accomplish this, the restorative dentist needs to be able to reproduce the anatomical features of the tooth, duplicate the underlying colors with various shades of composite, and create a surface polish and texture that match those of the adjacent teeth.^{1,2}

Dr. Hedgecoe did an excellent job in this Accreditation Case Type IV of restoring tooth #8 with composite resin, creating very natural light-reflecting surfaces that matched the adjacent central incisor with great accuracy. His use of tints and white composite effects also was exceptional. The fine quality of the final restoration demonstrates that Dr. Hedgecoe deserved to have his case pass (Figs 1 & 2).³

This case passed unanimously, and very few points were deducted. One examiner commented, "The 1:1 frontal view was very impressive." Another observed that there was inflammation. The examiners would have been more concerned had there been no inflammation preoperatively and then tissues became inflamed after the tooth was restored.

Dr. Hedgecoe displayed great composite artistry in his restoration of a badly fractured, multicolored, and highly textured anterior tooth. He should be proud of his work.

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Figure 1: The preoperative full-face frontal view (1:10) shows a large Class IV fracture on a highly textured, polychromatic tooth #8.



Figure 2: The postoperative full-face frontal view (1:10) shows an excellent Class IV composite restoration.

It should be remembered, however, that no restoration—no matter how imperceptible—is perfect. In this regard, the examiners noted the following issues:

- Criterion 53: *Is the color (hue, value, chroma) selection appropriate/natural, not monochromatic?* The restoration was low in value.
- Criterion 71: *Is the periodontal health optimal?* There was mild tissue inflammation.

References

1. Hartlieb D. Conservative treatment for the adolescent patient. *J Cosmetic Dent.* 2014 Spring;30(1):74-90.
2. Hugo B. *Esthetics with resin composite: basics and techniques.* 1st ed. Berlin: Quintessence Pub.; 2008.
3. American Academy of Cosmetic Dentistry (AACD). *A guide to Accreditation criteria.* Madison (WI): AACD; 2014. **jCD**



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