



Case Study

Class IV controlled layer concept utilising G-ænial™ A'CHORD in 3 shades

This case study presents the clinical management of a patient who presented with an existing failed anterior composite, requiring a Class IV direct composite replacement. The restoration aimed to achieve seamless integration with the natural dentition while restoring form and function.



Figure 1 - Pre-Operative presentation, exhibiting a failed direct composite restoration on the upper left central incisor (Tooth 21).



Figure 2 - Tooth surface cleaned and prepared with 37% Phosphoric Acid Etch prior to application of the adhesive with G-Premio BOND.



Figure 3 - Completion of the Palatal Shelf and interproximal wall with the application of G-ænial™ A'CHORD composite, shade JE. The interproximal wall was formed with the use of a plastic mylar strip and pull through technique to help develop an anatomical contour.



Figure 4 - The dentine layer was then completed by the application of an opaque shade of G-ænial™ A'CHORD Shade AO2. This is to provide the correct opacity and "block out" effect of the final restoration.



Figure 5 - A chromatic body shade, G-ænial™ A'CHORD shade A2 was then applied and extended beyond the bevel to mask the transition line. Internal anatomy in the incisal third was also sculpted and formed in this increment of composite resin. White tints, Essentia White Modifier (WM) was then utilised to accentuate the mamelons and to replicate similar characteristics present in the adjacent right central incisor.



Figure 6 - A final translucent shade of G-ænial™ A'CHORD shade JE was then placed to bring the anatomy to full contour.



Figure 7 - 2-week review demonstrating the complete optical and functional G-ænial™ A'CHORD restoration on the tooth 21.

Clinical images courtesy of
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