CASE STUDY

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Creating Deluxe Aesthetics
With Direct, Layered Composite
Resin Veneers

(abridged version, full case study available on request)

Patient T.H, a 37 year old female, presented on referral seeking improvement in her current dental aesthetics.

A comprehensive examination followed, with focus on her aesthetic concerns. Teeth 12 and

21 exhibited stained composite restorations with marginal deficiencies. Tooth 12 revealed only an incisal composite with buccal speckling. There was no buccal staining on the 11 composite veneer, however incisal view analysis revealed poor emergence profile and lack of proximal line angle development for all three restored teeth. The patient had a full maxillary body cant down to her left side with significant gingival show on full smile visible in the 1:10 ratio frontal smile view. This is classified as an aesthetically-critical case.

Discussions with the patient revolved around the placement of two or three composite veneers to correct her immediate aesthetic concern. An option was also given to the patient to have a comprehensive examination and a diagnostic wax-up generated, with a view to correct both soft tissue and hard tissue aesthetics, particularly her maxillary cant extending incisally to her left side. Although the patient was interested in this latter option, both financial and temporal restraints would prevent her from accepting this more comprehensive treatment. The patient accepted advice to replace the three composite veneers.

G-ænial ANTERIOR, GC Corporation, was the composite selected for this procedure.

Before



After



,'GC,'



CASE STUDY

Technique



Prior to isolation a colour map was noted. Complete removal of composite resin was planned, along with the creation of a light chamfer along the margin to control emergence profile and cervical shading.



Micro air abrasion using 50 micron aluminium oxide was completed for increased micromechanical retention. This was followed by etch and bond procedures.



A lingual shelf was created freehand using a Mylar matrix strip. This initial 0.3mm thick layer re-establishes the desired length and proportions of the tooth. G-ænial ANTERIOR AE (Adult Enamel) is a milky-white translucent enamel shade and perfect for this case.



To mask out the visible transitional edge, G-ænial ANTERIOR AO2 (Opaque A2) was used in the incisal 2/3rds, feathered and blended cervically, and characterised incisally. This "inside" layer is critical, forming the backbone for internal optical effects.



The penultimate layer involved two sub layers; G-ænial ANTERIOR IE (Incisal Enamel) as a greyish translucent shade for the incisal 1/3rd and G-ænial ANTERIOR A1 to modulate chroma in the cervical 2/3rds. The final enamel layer used G-ænial ANTERIOR AE (Adult Enamel)



Primary and secondary anatomy finishing was completed, before polishing using the Double Diamond two-step (Clinician's Choice) System at 5000 rpm to high shine, followed by final buffing using a polishing paste.



