



Filtek™

Supreme
Flowable Restorative

About the Case

The patient, a male in his mid-30s presented to the practice requesting improved esthetics of the lower anterior teeth. Dark/black triangles had developed after fixed orthodontic treatment implemented to correct moderate to severe anterior crowding of the lower anterior teeth.

Initially a referral was made to a periodontist for possible gingival and bone grafting procedures, but it was deemed unpredictable in this case. Other restorative options offered to the patient included indirect restorations; veneers and crowns. These were not a conservative option due to the aggressive nature of the required preparations to achieve the desired esthetic result. Patient opted for a minimally invasive approach.

Challenge

Traditional composite bonding techniques including the use of cellular strip and sculptable composite resin can be cumbersome to manage interproximal embrasure areas and contacts. Patient was happy with ortho treatment result but very conscious of the resultant dark triangles.

Outcome

The use of Bioclear® matrices (anterior) allowed the achievement of anatomical form. The combination of 3M™ Filtek™ Supreme Flowable Restorative and warmed 3M™ Filtek™ Supreme Ultra Universal Restorative sculptable composite created the perfect viscosity to wrap around the interproximal surfaces of the lower anterior teeth making what was once a difficult task, very simple. Also, the very challenging color match with B1 resulted in a pleasing esthetic outcome for the patient.



Clinical Case
Dr Michael Cai

Unsightly black triangles, a tricky restorative procedure made easy with flowable composites and warming.



See a step-by-step
Case Overview
on back.



About Dr Michael Cai

Dr Michael Cai graduated with Bachelor of Dental Science from the University of Western Australia, Perth, and was awarded with Honours for his outstanding academic and clinical achievements. He also has extensive experience working as a dental technician. He has received numerous prizes and the prestigious ADRF and Delta Sigma Delta research scholarships for research and publications in high ranked academic journals. Dr Cai has also completed the Master Clinician program in Implant Dentistry Program from the University of California in Los Angeles and the GIDE institute.

Dr Cai and his practice have featured in various media including Today Tonight, Sunrise, Cosmopolitan and Women's Day.

Case Overview



Fig 1: Pre ortho photo of lower arch. Depicting moderate to severe crowding of lower anterior teeth. Ortho Treatment was approximately 12 months duration.



Fig 2: Pre-treatment smile frontal. Presentation of black triangles in the lower anterior region. Patient also had a fixed lingual retainer that needed to be removed before the restorative procedure commenced.



Fig 3: Pretreatment intra oral retracted photo.



Fig 4: Close up – of black triangles between 42, 41, 31 and 32.



Fig 5: Rubber dam isolation. No LA required as this procedure is atraumatic and does not require any removal of tooth structure. Meticulous removal of biofilm before commencing bonding procedure is essential to allow optimal bond strength to uncut enamel and infinity edge margins.



Fig 6: Anterior Bioclear® matrices inserted and application of 3M™ Scotchbond™ Universal Etchant. Note: no requirement of wedges to stabilize matrices.



Fig 7: Bioclear® matrices with application of 3M™ Scotchbond™ Universal Adhesive. Rub 20s, air thin and cure 10s.



Fig 8: 3M™ Filtek™ Supreme Flowable Restorative injected followed by warmed 3M™ Filtek™ Supreme Ultra Universal Restorative (B1) sculptable composite resin, then cured for 20s.



Fig 9: Composite curing completed, matrices removed, pre-polishing.



Fig 10: Frontal smile photo, final result after finishing and polishing.



Fig 11: Pre-ortho Intra oral retracted.



Fig 12: Post-ortho and Restorative Intra oral retracted.



Fig 13: Post-treatment occlusal after lingual fixed retainer reapplied.

3M

3M Oral Care

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