3M Filtek™
Supreme
Flowable Restorative

Clinical Case
Dr Jordi Manauta

# Stabilising complex cases with single shade composites.

## About the Case

One of the benefits of using a single shade of composite in a restorative procedure is that it allows the clinician to focus on the shape of the tooth which is critical to the final aesthetic outcome.

## Challenge

The patient was unhappy with the results of previous orthodontic and restorative treatments and expressed a desire for a more aesthetic outcome. A diagnostic and aesthetic assessment were the first stages in the treatment of this complex case.

## Outcome

The single shade composite strategy using 3M™ Filtek™ Supreme Flowable Restorative and 3M™ Filtek™ Universal Restorative Shade A2 (formulated to match identically), allowed us to focus on anatomical shape and finishing and polishing details resulting in a very aesthetic final restoration.



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


## About Dr Jordi Manauta

Born in Mexico City, Dr. Jordi Manauta graduated from the Technological University of Mexico (UNITEC) with a degree in dentistry. He continued his postgraduate studies in operative and aesthetic dentistry at the International University of Catalonia (UIC) in Barcelona, Spain, where he obtained a master's degree.

He is currently a visiting professor at the University of Siena (Italy) and the University of Seville (Spain), and practices aesthetic and conservative dentistry privately in Santa Margherita Ligure (Italy).

Dr. Manauta has developed various materials and instruments for aesthetic dentistry and photography in collaboration with international companies. He is a co-author of the book "Layers: An Atlas of Composite Resin Stratification" (Quintessence, 2012); an author and co-author of publications in international journals; and a scientific consultant for two European journals.

# Case Overview

**Fig 1:** Pre-operative aesthetics.

**Fig 2:** 3 months after crown lengthening bone surgery, the patient is ready for the planned restorative treatment.

**Fig 3:** On the day of treatment, colour selection was completed with a direct mock-up using the "button technique" which involves placing round composite button samples, in different shades, on the middle third of the tooth and photographing using a polarising lens.

**Fig 4:** Another approach to shade selection is to "try in" the composite by simulating the thickness, opacity, and colour on the tooth to be treated. It is important that the teeth stay hydrated during this procedure as desiccated teeth appear much whiter than they otherwise would.

**Fig 5:** Rubber dam isolation is critical to the success this restorative procedure, and preferred over other isolation techniques, because the rubber dam allows provides access to a dry field needed to create the cervical contour and emergence profile most efficiently. The existing restoration is conditioned by sandblasting using 29 micron aluminum oxide.

**Fig 6:** Bonding surfaces were etched with 3M™ Scotchbond™ Universal Etchant. The gel was rinsed off with water after 15 seconds. 3M™ Scotchbond™ Universal Adhesive was applied, rubbed for 20 seconds, treated with a gentle stream of air for solvent evaporation, and light cured for 10 seconds.

**Fig 7:** The "Front Wing" technique was used for creating cervical contour, emergence profile, and tooth dimensions. A low stress, high polish universal composite was used for the final restoration (3M™ Filtek™ Universal Restorative).

**Fig 8:** After matrix removal, both distal and mesial contours are optimised. Pre-finishing the composite is extremely helpful before starting the construction of the neighbour teeth because it allows you to see very small surface defects which are easily corrected at this time.

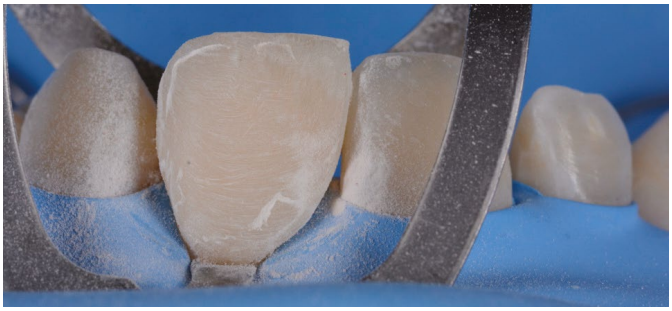

**Fig 9:** Pre-finishing the composite is extremely helpful before starting the construction of the neighbor teeth because it allows you to see very small surface defects which are easily corrected at this time.

**Fig 10:** In my experience, small defects are more easily corrected with flowable composite (in this case 3M™ Filtek™ Supreme Flowable Restorative) while bigger defects are more easily corrected with universal or bulk fill composite "pastes".

**Fig 11:** A matrix is used to protect the neighbouring tooth while placing 3M™ Scotchbond™ Universal Etchant. Because the protective matrix has not been deformed, it can be reused to build interproximal anatomy.

**Fig 12:** After completing the cervical and proximal contour, the buccal area of the tooth is modeled using a very wide instrument designed for direct veneers (SOLO Anterior, LM instruments, Finland).

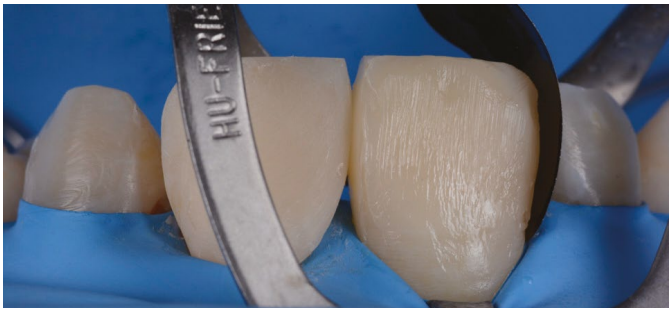

**Fig 13:** Backfilling of the front-wing matrix is now complete. If the space is very narrow, you may find it easier to use 3M™ Filtek™ Supreme Flowable Restorative followed immediately by 3M™ Filtek™ Universal Restorative (also referred to as the "Snow Plow" technique).

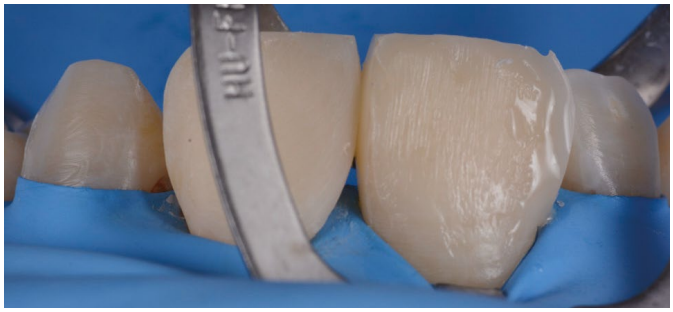

**Fig 14:** Image of the restoration after removal of the matrix and before the finishing. The restoration of left canine and premolar were performed using the same technique as the central incisors; focusing mainly on shape and contours.

**Fig 15:** Restoration after rubber dam removal but before the final finishing, polishing and occlusal adjustments are made.

**Fig 16:** The final gloss was achieved using the 2-step 3M™ Sof-Lex™ Diamond Polishing System. Future adjustments are still possible when using conservative direct composite techniques. The single composite shade strategy allows the clinician to focus on anatomical shape and finishing and polishing details resulting in a very aesthetic final restoration.


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