

About the Case

A ten-year-old patient chipped his right central incisor while playing with the family cat. The case was treated during an emergency visit.

Challenge

When a child is involved, and only a small repair is needed, it is important to have a restorative delivery system that is fast, easy to use, and dispenses a controlled volume of material.

While flowable composites provide many desirable features, the materials themselves often contain air bubbles. If these bubbles go undetected, and the composite is cured, a time-consuming repair may be needed to achieve an aesthetic and colour stable final restoration.

Outcome

In a 10 minute procedure it was possible to aesthetically integrate the 3M[™] Filtek[™] Supreme Flowable Restorative into the patient's natural tooth structure making this an effective and efficient treatment option.

Clinical Case Dr Walter Devoto

Marginal enamel chipping: An easy fix using flowable composite.





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





About Dr Walter Devoto

Dr. Walter Devoto graduated with honours in dentistry and dental prosthesis in 1991 at the University of Genoa, Italy. He is particularly interested in the fields of conservative dentistry and aesthetic dentistry and runs his own private practices in Sestri Le vante and Portofino. In addition, he is collaborating with diverse prestigious dental offices throughout Europe, which specialise in aesthetic dentistry. He has worked as a teacher and demonstrator at the University of Genoa and as a lecturer at the universities of Siena and Madrid. Currently, he's a lecturer at the International University of Catalonia, Barcelona, Spain, and visiting professor at the Aix-Marseille University in Marseille, France. Dr Devoto is also the founder of the Styleitaliano group www.Styleitaliano.org

Case Overview



Fig 1: A fracture on the upper-right central incisor is evident on this pre-operative facial view.



Fig 2: The palatal pre-operative view reveals how little tooth structure is missing and, conversely, now little composite will be required for the restorative procedure.



Fig 4: 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: After the first layer of flowable is cured for 10 seconds with a 3M[™] Elipar[™] S10 LED Curing Light, the second layer of flowable is applied and also light cured. A 3M[™] Sof-Lex[™] Extra-Thin Contouring and Polishing Disc (Course Grit) is used to create the general form of the tooth.



Fig 5: 3M[™] Filtek[™] Flowable Restorative was applied directly from the needle tip delivery system to the incisal edge in need of repair.



Fig 8: A slow speed coarse bur (Styleitaliano Finishing Bur Kit) recreates the original texture of the tooth.



Fig 3: After cleaning delicately with a 3M[™] Sof-Lex[™] Extra-Thin Contouring and Polishing Disc (Course Grit) the tooth is etched for 15 seconds using 3M[™] Scotchbond[™] Universal Etchant and rinsed for 20 seconds.



Fig 6: The first layer of 3M[™] Filtek Flowable Restorative prior to light curing. Notice that the material is stable on the tooth (no running or dripping).



Fig 9: The 3M[™] Sof-Lex[™] Diamond Polishing System was used to obtain the final restorative luster.



Fig 10: The final aesthetic result reveals an excellent match in both color and form. The 3M[™] Filtek[™] Supreme Flowable restorative was easy to dispense, allowed for precise placement, and the final restoration was free of voids or defects.



Fig 11: Notice that the margin of the restoration is undetectable, even without having prepared the tooth, thanks to the excellent adaptation of the 3M[™] Filtek Flowable Restorative to the natural tooth structure.



3M Oral Care

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