

Rational use of Metafix and Compothixo

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The correct use of Compothixo™ is described in this clinical case.

The clinical case refers to a young patient, 33 years old, who required a revision of the second upper quadrant with the old amalgam fillings being replaced by a composite (Photo 1).



Photo 1

After isolating the quadrant with a rubber dam (Photo 2), I proceeded to remove the old restorations and to clean and prepare the cavities (Photo 3).



Photo 2



Photo 3

At this point, I began with the restoration closest to the back of the mouth to save the patient from becoming tired and having to close his mouth too often and thus complicating the procedure.

A MetaFix matrix was applied before I pre-etched the enamel using orthophosphoric acid to improve the adhesion of OptiBond™ XTR (Photo 4).



Photo 4

The pre-etching of the enamel, followed by rinsing and drying, was proceeded by etching and priming, as per the first step of OptiBond XTR (Photo 5).



Photo 5

After about 20 seconds, I gently used an air spray and proceeded to the second step of the etch and dry system (Photo 6).



Photo 6

Taking a small quantity of composite (Herculite® XRV Ultra™, enamel A1), I adapted the material with the condensing tip of Compothixo, using the continuous vibration mode (Photo 7).



Photo 7

Once the restoration had been adapted with the spatula tip in intermittent vibration

mode (this method facilitates smoothing out without the composite rolling around the spatula), I adapted the material to the matrix. This made it easy to build up the interproximal wall without any air bubbles or voids (Photo 8).



Photo 8

The operation was repeated on the other interproximal wall and at the same time the matrix was removed (Photos 9-10).



Photo 9



Photo 10

The cavity was then filled, leaving space for the last layer of saturated dentine (A4) using the condensing tip of Compothixo, used in intermittent vibration mode (it is enough to rest your finger on the switch without pressing all the way down on the release) (Photos 11-12).



Photo 11



Photo 12

The coronal dentine was applied in two steps, the cusps being modelled alternatively with the Compothixo pointed tip, also in this case used with intermittent vibration to enhance the adaptation and morphology, without the material becoming rolled up around the tip (Photos 13-14).



Photo 13



Photo 14

Kerr Kolor + Plus[®] Ochre was used in order to achieve an even more saturated dentine, and Brown was used characterize the fissures (Photos 15-16).



Photo 15



Photo 16

The final layer of enamel (Incisal medium) was also applied in two stages; first using the spatula tip in continuous vibration and then the modelling tip in intermittent vibration, in order to further enhance adaptation and morphology (Photo 17-18).



Photo 17



Photo 18

A thin layer of glycerine was applied to the surface before the final polymerization, thus avoiding the occurrence of surface oxygen inhibition (Photo 19).

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Photo 19

The finishing is thus made much easier as, by constructing the occlusal table step by step, any excesses are kept to a minimum.

A diamond-coated bur (20 microns) or multi-bladed burs with 8-12 blades were used (Photo 20).

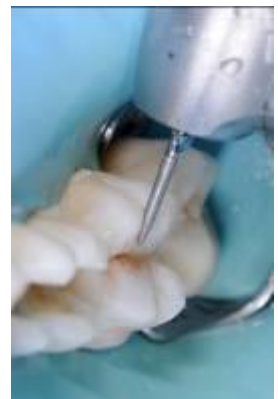


Photo 20

The interproximal finish was achieved using an EVA handpiece with blades of decreasing grain size (Photo 21).



Photo 21

This clinical case was concluded by carrying out restoration work on 2.4 (Photos 22-23-24-25) and on 2.5 (Photos 26-27) using the same type of composite.



Photo 22



Photo 23



Photo 24



Photo 25



Photo 26



Photo 27

When everything is complete, the polishing phase can be simplified by using Opti1Step and OptiShine™ (Photos 28-29).



Photo 28



Photo 29

The aesthetic appearance achieved shows that modern composites, when the dentist is familiar with their properties, can be selected for posterior restoration work, also in consideration of the positive response of the periodontal tissues (Photos 30-31).



Photo 30



Photo 31