FGM

Vittra APS UNIQUE

Universal chroma composite with the capacity to mirror the tooth color.

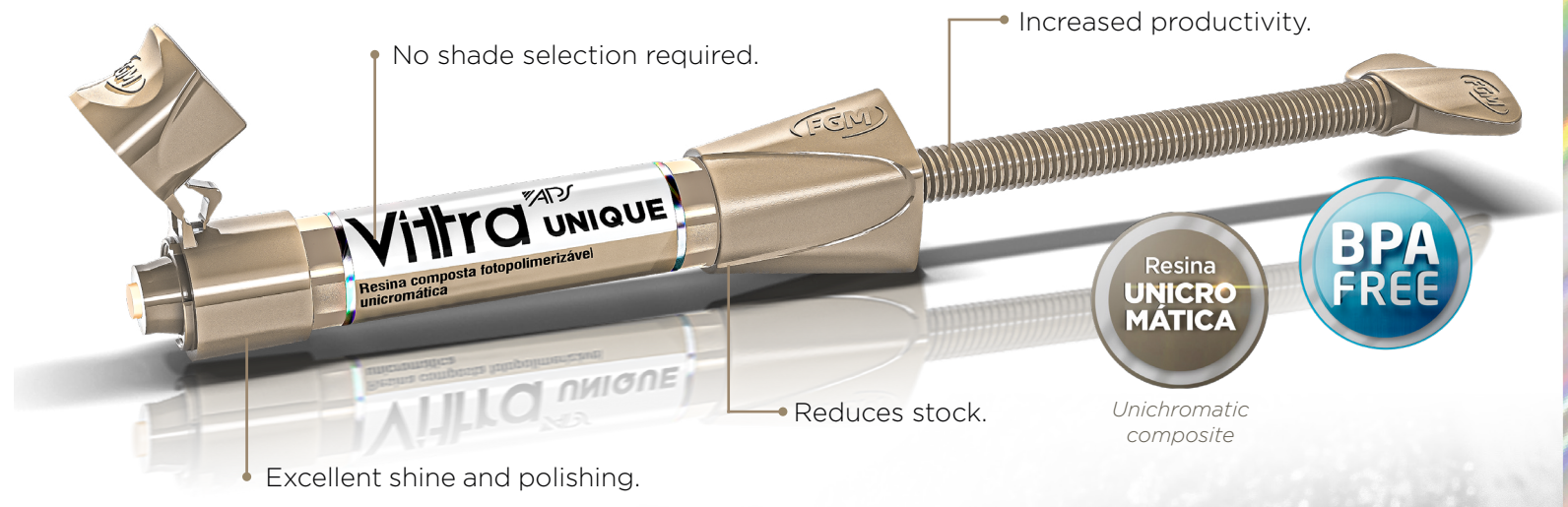


ONE SHADE FOR ALL SHADES

FGM DENTAL GROUP | 25 YEARS

PRACTICALITY AND ECONOMY FOR THE CLINICAL DAY-TO-DAY WITH HIGH ESTHETICS PERFORMANCE

In the face of the complexity of options of composites and shades available on the market, Vittra APS Unique emerges, the universal chroma composite by FGM that copies the shade of the dental substrate, revolutionizes the technique, and brings practicality for the clinical day-to-day of the professional.



Unichromatic composite

Presentation: Syringe with 4g.



CHAMELEON EFFECT

COMPOSITE FOR
ALL SHADES
FROM BLEACH TO D4.

ONE SHADE FOR ALL SHADES

- Universal chroma: only one shade;
- From Bleach to D4 with a single composite;
- Does not require stratification in the vast majority of cases;
- Simple incremental technique without the use of different opacity/translucency degrees;
- Radiopaque.

BEFORE THE POLYMERIZATION



COMPOSITE FOR
ALL SHADES
FROM BLEACH TO D4.

THE CHAMELEON EFFECT

The optical properties of Vittra APS Unique define themselves after its polymerization. The chameleon effect occurs due to the chromatic mirroring characteristics of the composite, which is capable of capturing and reflecting the shade of the dental substrate.

Before the polymerization, the contrast and the opaquer shade of the composite facilitate the visualization and control of the restorative procedure.

Lastly, the fillers, the well-dosed opacity, and the esthetics of the APS technology are fundamental to achieve **perfect mimicry.**

AFTER THE POLYMERIZATION



CLINICAL CASE



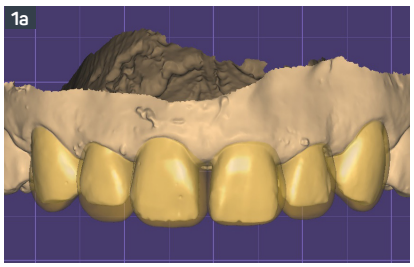
FINAL

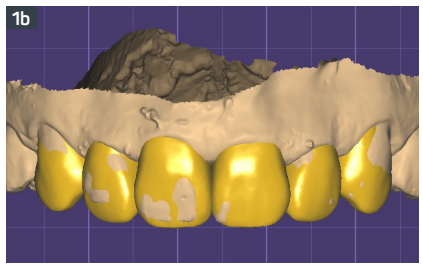
INITIAL

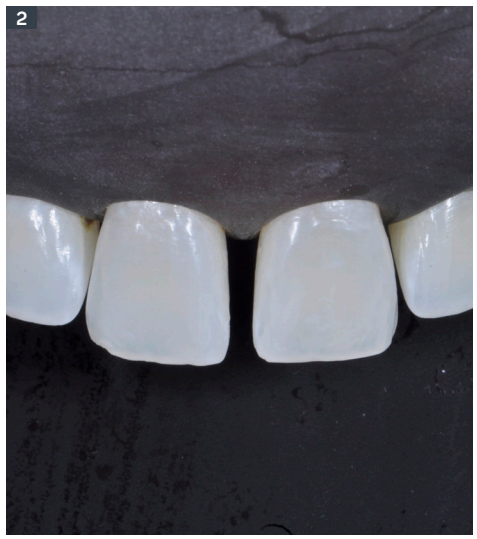
Authors: Dr. Carlos E. Francci, Dr. Alexander C. Nishida and Dr. Guilherme de S. F. Anzaloni Saavedra.
Male patient, 27 years old.

STRATIFY OR SIMPLIFY WITH COMPOSITES?

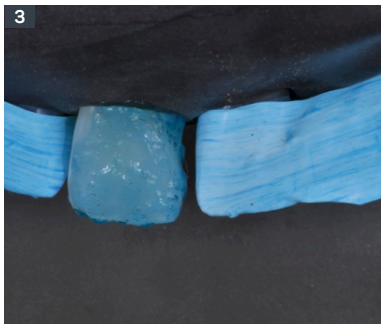
ABOUT THE CASE: The patient reports dissatisfaction with the shade and the spaces between the upper anterior teeth. The case offered an opportunity to perform the whitening therapy and the re-anatomization with the Vittra APS Unique composite.

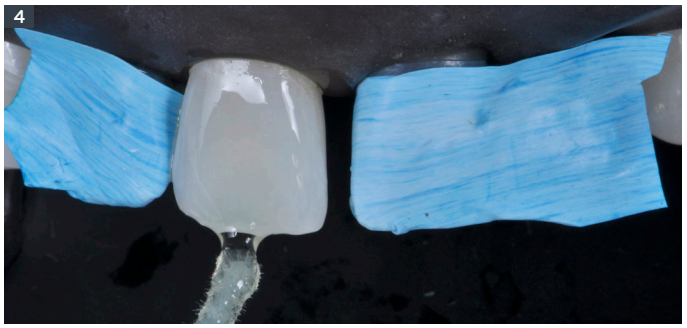






After one week of the end of the whitening therapy with Whiteness Perfect 10% (FGM), the restorative treatment was initiated.
Fig. 1a - The models were scanned (Carestream CS 3600 Color Intraoral Scanner), and the digital planning of the smile on the upper arch was worked with Exocad ChairsideCAD (Exocad). Observe that a semi-transparent superposition of the final planning of the smile was used to visualize what really needed re-anatomization with composite resin.
Fig. 1b - In this screen from Exocad, the same planning was worked yet with a greater opacity for the modification of the composit, showing where the enamel would be visible, without covering with composite resin.
Fig. 2 - For the start of the restorative process, absolute isolation was performed with a rubber dam to control moisture and improve the visualization of the operative field.





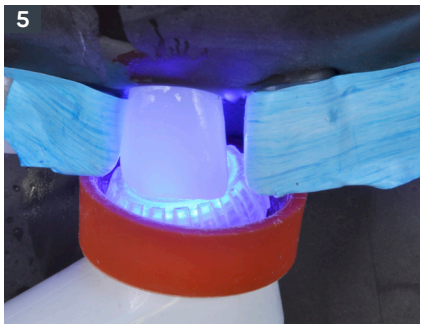
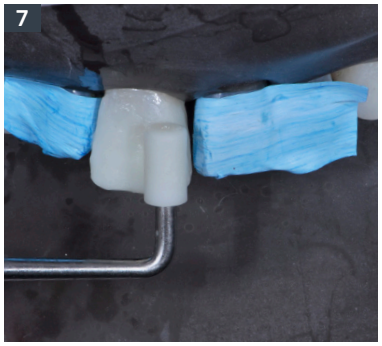


Fig. 3 - Conditioning of the enamel performed with Condac 37 (37% phosphoric acid - FGM) in the entire vestibular surface of the right upper central incisor to guarantee the adhesion of the composite on any point of this tooth. The protection of the adjacent teeth was performed with Teflon tape.
Fig. 4 - After abundant washing and drying of the enamel, the Ambar Universe APS (FGM) adhesive system was applied, where one may notice the almost colorless aspect, a characteristic of this adhesive for having little camphorquinone.



Fig. 5 - The photopolymerization is potentialized by the presence of the APS (Advanced Polymerization System) in the Ambar Universal formulation.
Fig. 6 - An increment of Vittra APS Unique composite was applied to the vestibular surface and sculpted softly.



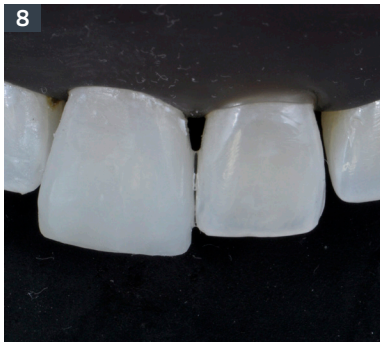






Fig. 7 - The composite was sculpted with the aid of a rolling non-stick tip spatula that rotates to spread the mixture uniformly, without bubbles.
Fig. 8 - Aspect of the central incisor with its primary anatomy finalized. The Vittra APS Unique composite mimicked the shade of the substrate without presenting a difference between the enamel of the tooth and the composite restoration, even without having done a bevel.
Fig. 9 - The same process was repeated for the construction of tooth 21. In central incisors, it is essential that the teeth are specular images of one another to confer harmony.
Fig. 10 - After performing the restorations of the lateral incisors for closing the remaining spaces, repeating the same protocol of preparation, adhesion, and construction, strategic additions were performed at the incisal edges of the canines to redefine the guides and harmonize the incisal battlements.

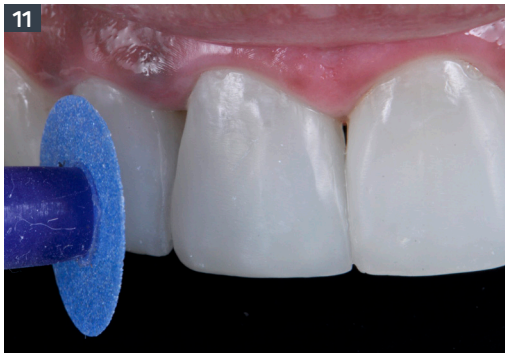










Fig. 11 - Small corrections and excesses were removed with the use of the Diamond Pro Disks (FGM) according to the sequence from the most abrasive (more saturated blue) to the least abrasive (lightest blue or white).
Figs. 12a and 12b - The pre-polishing was performed with the Diamond ACI and ACII pastes (FGM) using the Diamond felt disks (FGM).
Fig. 13 - The Diamond R paste (FGM) (12µm) was used for polishing with the moist Diamond and Diamond Flex felt disks.
Fig. 14 - The last polishing step is performed with the Diamond Excel diamond paste (2 to 4µm). For being a diamond paste, it allows polishing the Vittra APS Unique composite and the adjacent enamel.







Fig. 15 - The patient's smile at the end of the treatment. The whitening illuminated the substrate, and the closing of the spaces provided harmony to the smile as a whole.
Figs. 16a and 16b - Details of the re-anatomization with Vittra APS Unique composite in the right and left views.

CLINICAL CASE

02



FINAL

INITIAL

Author: PhD Fábio Sene.
Female patient, 35 years old.

USE OF UNIVERSAL CHROMA COMPOSITE IN SUBSTITUTION OF AN AMALGAM RESTORATION.

ABOUT THE CASE: Patient dissatisfied with the amalgam class I restoration on tooth 37. After detailedanamnesis, clinical and radiographic examination, no pathological alteration was observed.





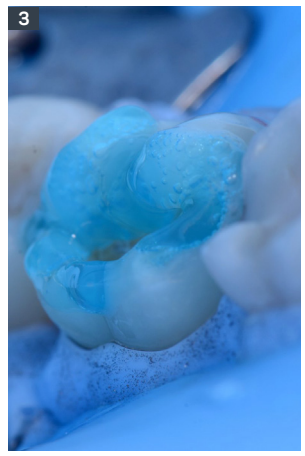
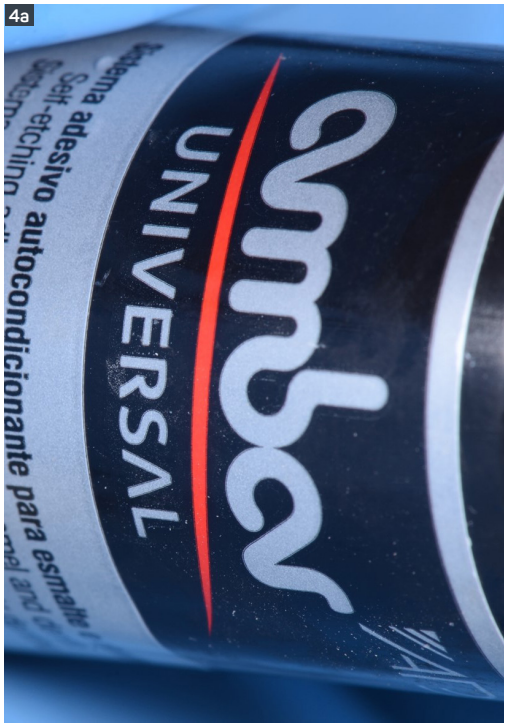


Fig. 1 - Initial image showing the amalgam restoration.
Fig. 2 - Absolute isolation and removal of the amalgam.
Fig. 3 - Acid conditioning of the cavosurface enamel with Condac 37% for 15 seconds.





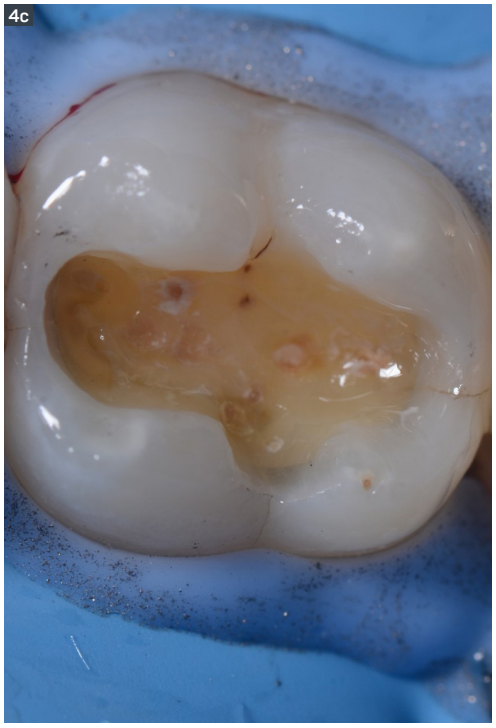
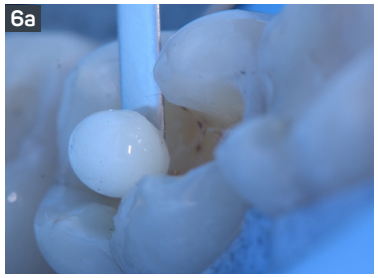
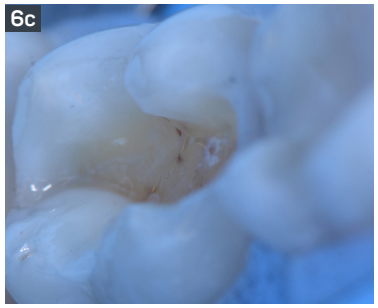


Fig. 4a - Use of the Ambar Universal APS adhesive for adhesion.
Fig. 4b - Application of the Ambar Universal APS on dry dentin by the self-conditioning technique.
Notice the translucent aspect of it due to the APS technology.
Fig. 4c - Adhesive applied and photoactivated.
Fig. 5 - Vittra APS Unique unichromatic composite.









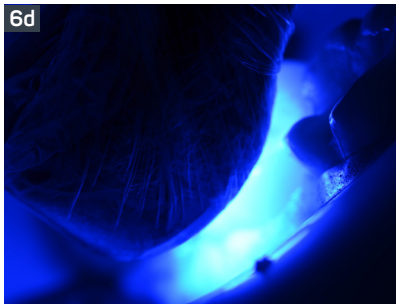
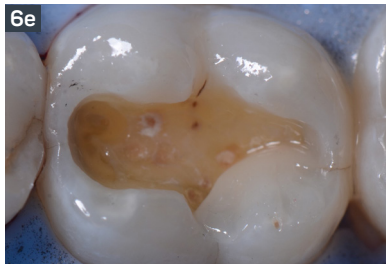
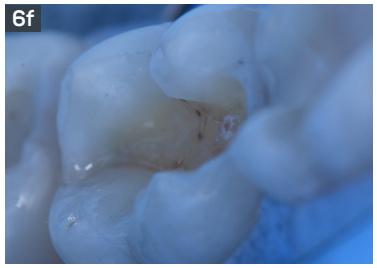


Fig. 6a - Start of the incremental application of the Unique composite. Notice the opaque white aspect of the composite before photoactivation.
Fig. 6b - Occlusal view of the composite increment and the opaque white coloration. Fig. 6c - Detail of the composite placed reconstructing the cusp.
Fig. 6d - Photoactivation.





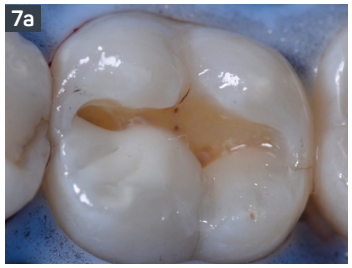
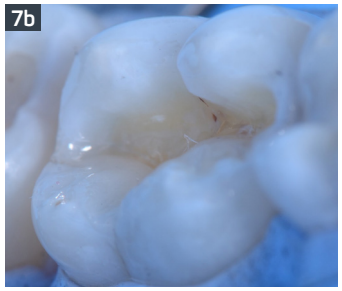
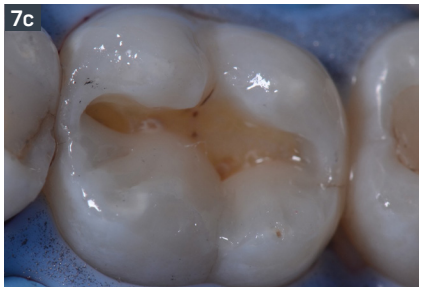
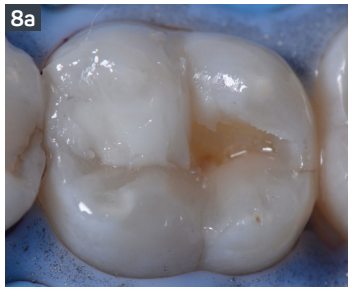


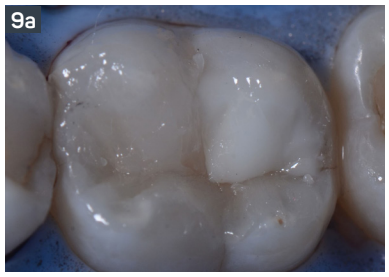
Fig. 6e - Notice the chromatic integration of the Vittra APS Unique composite after being photoactivated. The composite absorbs the shades of the lateral walls of the cavity, mimicking the shade of the tooth.
Fig. 6f - Detail of the integration of the composite after being photoactivated.
Fig. 7a - Reconstruction of the ML cusp.
Fig. 7b - Photoactivation.
Fig. 7c - Chromatic result after the photoactivation.

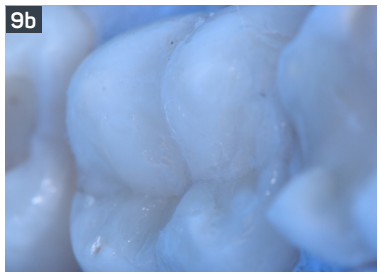


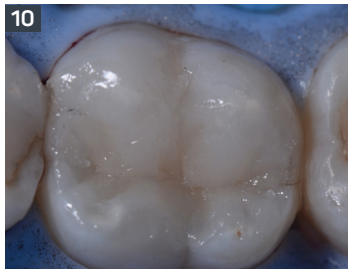












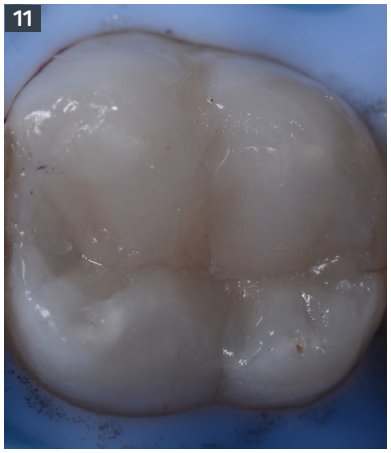


Fig. 8a - Reconstruction of the MV cusp.
Fig. 8b - Photoactivation.
Fig. 9a - Chromatic result and reconstruction of the DV cusp. Notice the chromatic difference of the composite before and after being photoactivated.
Fig. 9b - Photoactivation.
Fig. 10 - Finalized restoration. Notice the incredible chromatic mimicking of the Vittra APS Unique composite.
Fig. 11 - Result after the polishing of the restoration.



Fig. 12 a - Final result after the removal of the isolation. Notice how the composite absorbed the optical characteristics of the dental structure, integrating completely with the tooth, producing a universal chroma restoration with a polychromatic effect.
Fig. 12b - Highlight of the restored anatomy and chromatic integration of the composite.



VITTRA APS UNIQUE GALLERY

Restoration in anterior tooth and diastema closure

Vittra APS Unique delivers esthetics, shine, and polishing to the restorations, requirements even more valued in anterior teeth. Its optical characteristics allow mirroring the shade of the teeth with efficiency and guaranteeing a superior esthetic result.

Obs.: in the case of very wide anterior cavities, the dentist must use a background composite as shade support.



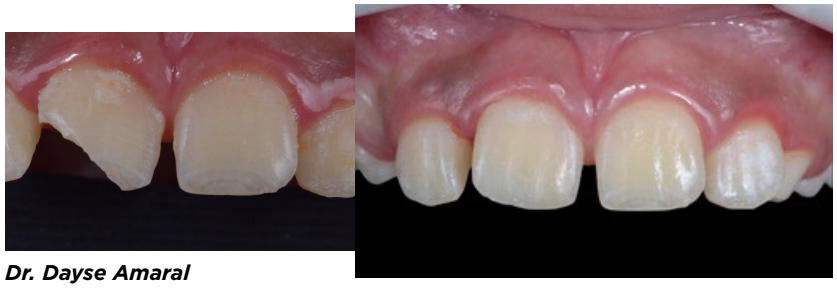
Dr. Rodrigo Reis



Dr. Antonio Sakamoto

Pediatric dentistry

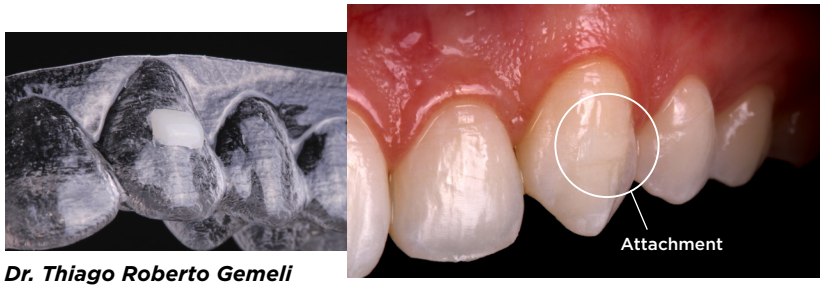
Restoring the oral health of children is not always a simple task; the challenges emerge, and the dentist must be agile and assertive. For this reason, Vittra APS Unique is the solution because it copies the shade of the tooth, does not require shade selection, brings agility to the professional, and, of course, more comfort to the patient.



Dr. Dayse Amaral

Use in invisible aligners

Transparency and discretion are fundamental in orthodontic treatment with invisible aligners. Due to its capacity to copy the shade of the dental substrate and achieve perfect mimicry, the composite is the best alternative for making the attachments.



Dr. Thiago Roberto Gemeli

Posterior tooth restoration

The high resistance to flexion and tenacity to fracture of Vittra APS Unique guarantee that the composite can support the stress resulting from the masticatory forces, even in posterior teeth.



Dr. Claudio Sato and Dr. Adriano Sapata

Restoration over implant

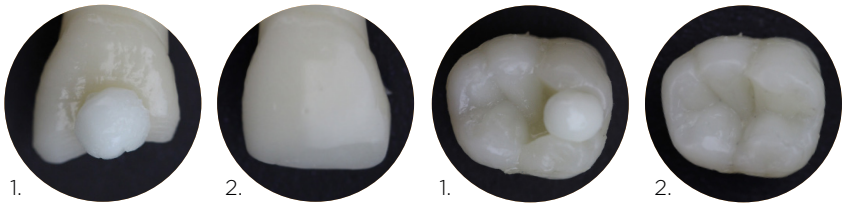
After isolating the implant screw with white Teflon, the dentist manages to mask this region with perfection since the composite integrates chromatically to the substrate, reproducing a perfect mimicry.



Dr. Augusto Bessa

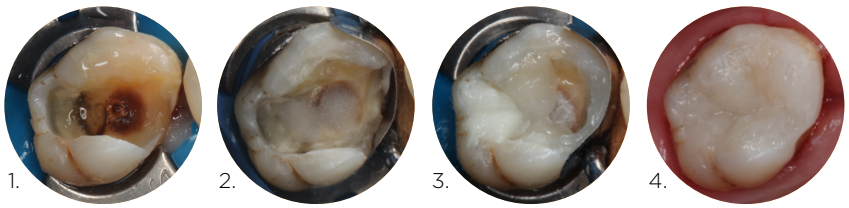
INDICATIONS

- Permanent and deciduous teeth: direct restorations of anterior and posterior teeth (classes I, II, III, IV, V, and VI)



Anterior teeth *Posterior teeth*

- For cavities of classes I, II, V, and VI, in case of darkening, cover the area with dentin composite or Vittra APS composite and proceed with the restoration using the incremental technique with Vittra APS Unique.



***1.** Cavity. **2.** Lining of the pulp wall with Glass Ionomer Cement. **3.** Three increments of Vittra APS Unique composite. **4.** Finalized restoration after polishing and hydration.*

- Class III and IV cavities (without a back wall that provides shade support): make a layer that will serve as a background for the restoration and finalize the rest of the volume with Vittra APS Unique incrementally.



1. Cavity. **2. Background composite. **3.** Restoration finalized with Vittra APS Unique.*

TIPS: USING BACKGROUND COMPOSITE

When there is no background wall to copy or if there is a shade modification in the dental substrate, such as darkening exacerbated by the formation of tertiary dentin, amalgam staining, or other stains without defined origin, the use of background composite as shade support for Vittra APS Unique is necessary.

EXCELLENT RESULT WITH AMBAR APS AND AMBAR UNIVERSAL APS HIGH ESTHETICS ADHESIVES.

- **A colorless aspect** that facilitates the chromatic mirroring of Vittra APS Unique, producing an even better esthetic result, without the interference of a third shade;
- High degree of conversion and adhesion, even on dentin with greater moist;
- Lower marginal infiltration index;
- Formation of a more resistant adhesive film;
- Versatility of use with minimal sensitivity;
- MDP: scientifically proven lasting adhesion.



DIFFERENTIALS OF THE APS TECHNOLOGY

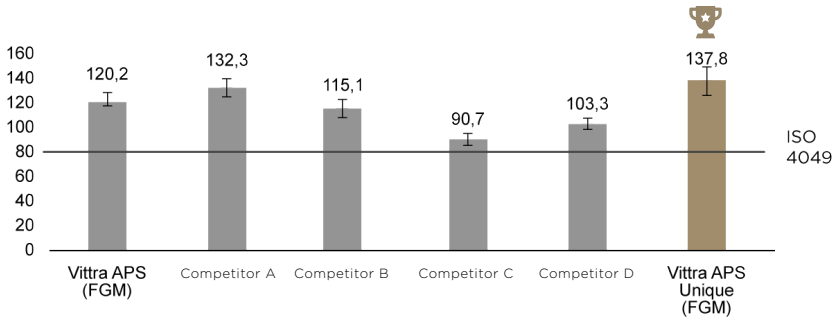
The APS (Advanced Polymerization System) technology, the exclusive development of FGM, consists of an innovative combination of more transparent photoinitiators that interact with each other and allow expanding the polymerization capacity of the materials.

Benefits:

- Facilitated shade transmission due to the low concentration of camphorquinone: the APS system uses more transparent photoinitiators;
- Longer work time under the reflector/environment light;
- High resistance to flexion and tenacity to fracture.

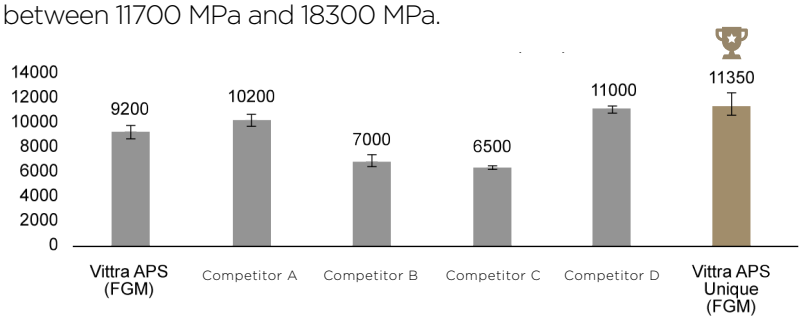
Resistance to flexion (MPa*)

Resistance to flexion is defined as the maximum tension that a material supports when submitted to flexion. The higher the result is, the greater the capacity of a composite to support the stress resulting from masticatory forces in the oral environmental will be.

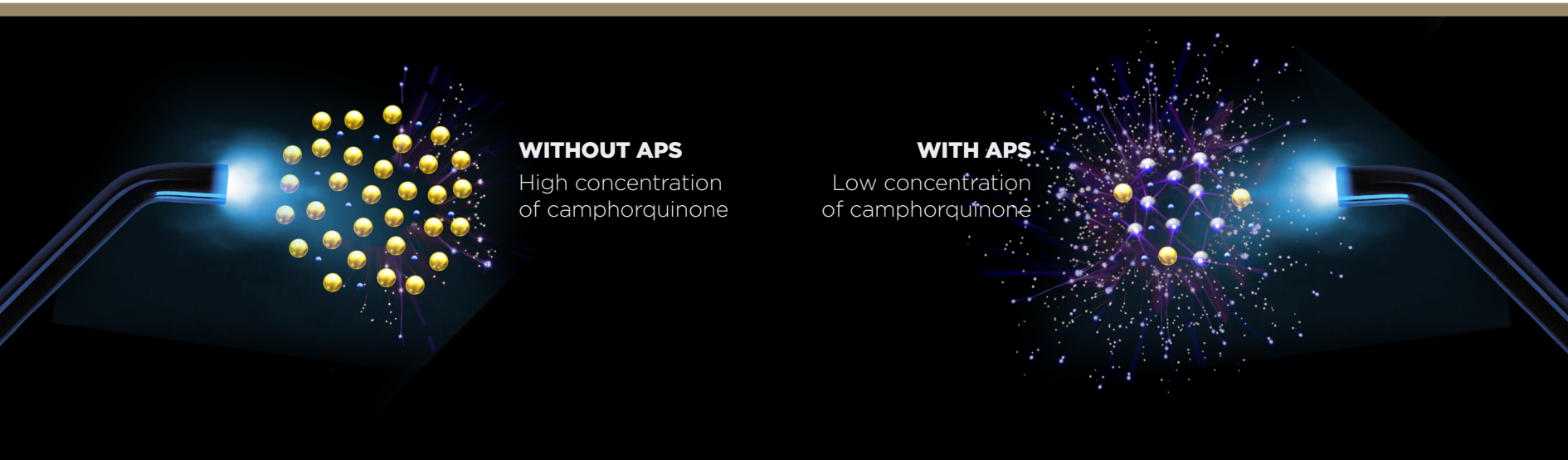


Flexural elasticity modulus (MPa*)

The Elasticity Modulus reflects an intrinsic property of the material to resist pressures imposed by masticatory forces. The smaller the deformation for a given tension value, the greater the elasticity modulus will be (greater rigidity).
The ISO 4049 standard does not specify values for the elasticity modulus, but, in a bibliographic reference**, that of human dentin is between 11700 MPa and 18300 MPa.



** Internal tests. **Anusavice, K.J; Shen, C; Rawls, H.R. - Phillips Materiais Dentários. 12th Edition. Rio de Janeiro: Elsevier, 2013.*



WITHOUT APS
High concentration of camphorquinone

WITH APS
Low concentration of camphorquinone

VITTRA APS UNIQUE IS UNIQUE!



“A composite for clinical situations that require agility, stock economy, and clinical time gain, with an interesting esthetic result without compromising the quality of one’s work.”

Dr. Claudio Sato and Dr. Adriano Sapata

“Certainly, the launch of Vittra APS Unique is among the greatest launches in the field of restoration materials in recent years, worldwide. The material is fantastic, the mimicking capacity is incredible, and the clinical results I’ve had so far are surprising.”



Prof. Dr. Marcos Barceleiro



“To simplify with quality! Vittra Unique is one of the rare choices that allow the clinician to minimize steps and always get the shade of their restorations right! Vittra APS Unique is unique.”

Dr. Dayse Amaral

FGM DENTAL GROUP | 25 YEARS

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April/2021

