CL0095

Direct resin composite stratification technique: case report of an anterior Class IV restoration.

Coito, C[1] ; Silva, A[1] ; Cebola, A[2] ; Ribeiro, M[2] ; Casaca, T[3]; Vaz Osório, V[2] ; Almeida, I[4]; Dias, G.[5];

1 – Dentist; Assistant Teacher in Dentistry Department, School of Dentistry , University of Lisbon; Master in Aesthetic Dentistry.; 2 – Dentist; Integrated Masters in Dentistry; Improvement in Teaching Methods in Oral Surgery, School of Dentistry, University of Lisbon.; 3 – Dentist; Integrated Masters in Dentistry; 4 – Dentist; Post-graduation in orthodontics; 5 – Dentist; Assistant Teacher in Oral Surgery Department, School of Dentistry, University of Lisbon; Oral Surgery Specialist

OBJECTIVE

Describe a simplified layering technique based on a biomimetic approach for anterior Class IV restorations. A step-by-step polychromatic stratification protocol will be presented.

METHODS

A 28 year-old female patient, with good health condition, presented with one Class IV unaesthetic restoration on tooth 11. Clinical and radiographic examination did not reveal any pulpal damage. After discussing various treatment options with the patient, conservative restoration using direct resin composite was selected. A polychromatic restoration was performed, with Enamel HFO Plus by Micerium and a silicon lingual matrix was used to facilitate the layering technique.

Unaesthetic restoration on tooth 11

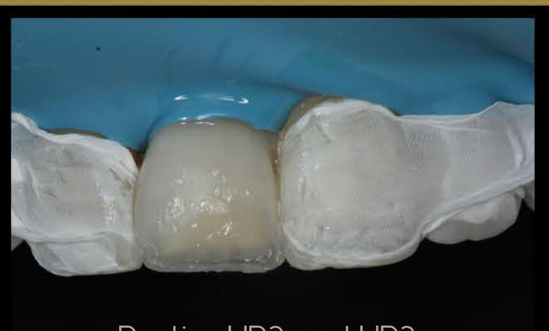
Tooth preparation

37% Phosporic acid etching

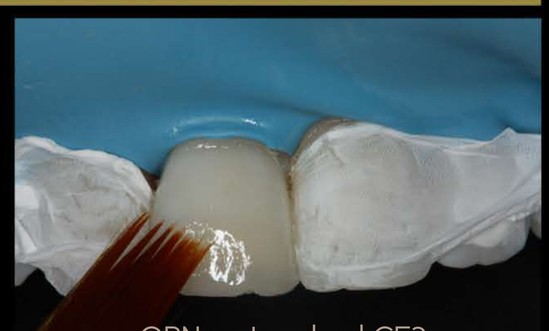
Adhesive system – Optibond FL

Palatal enamel (GE3)

Incisal halo (UD2)



Dentine UD2 and UD3



OBN and enalmel GE3

After layering

Finishing – Q-finishers (Komet)

Finishing – Optidisc (Kerr)

Finishing – Green Akransas (Komet)

Polishing – Grey enamel shinny (Micerium)

Polishing – Blue enamel shinny (Micerium)

Polishing – Opalustre

Polishing – Interproximal strips (Kerr)

Final restoration

2-years follow up without polishing

CONCLUSION

The biomimetics composite restorations are growing in popularity as conservative and predictable restorative treatment alternatives to ceramics, minimizing invasiveness, chair time, and costs for patients. An understanding of the fundamental layering, contouring, and polishing principles is paramount to the success of any direct resin composite restoration.

BIBLIOGRAPHY

1 – Dietschi D.Layering concepts in anterior composite restorations. J Adhes Dent. 2001;3(1):71-80 ; 2 – Results AO. Finishing and Polishing Today's Composites: Advanced Composite Materials. 1-12; 3 – Micerium. Master catalogue.; 2006 Available at: http://www.italdent.cz/kat2006ena.pdf ; 4 – Vanini L. A cor segundo Lorenzo Vanini. Rev Dental Press Estét. 2001 out-dez;8(4):98-107.