

Demanding direct diastemas closure in the esthetic zone Minimizing the clinical mistakes <u>Spaveras A.¹, Antoniadou M.²</u>

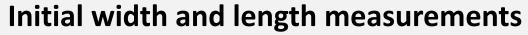


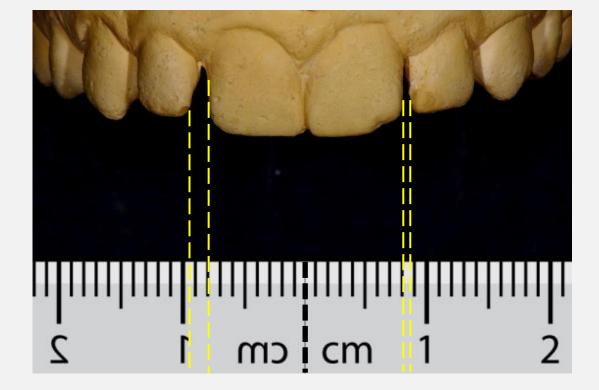
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Case Report: A 24-years-old female was esthetically dissatisfied with her teeth value and the diastemas present in the anterior and premolar areas. At first, a home-bleaching procedure (10% carbamide peroxide, White Dental Beauty, NOVON) was performed in order to ensure the desired transition from A3 to B1 value, measured with the classical VitaPan shade guide (VITA Zahnfabrik). Then, a digitally aided diagnostic wax-up was created measuring the optical width of the planned restorations in order for the clinical mock-up to be transferred correctly. The appropriate dentine chroma and enamel shades were selected using the Inspiro Direct Shade guide (Edelweiss DR AG). After field isolation with rubber-dam and minimal buccal preparation of tooth 12, direct stratification of the above mentioned composite resin was performed accordingly¹⁻³.









Digital planning of the restorations



Wax-up on the working cast



Shade selection before bleaching



Shade selection after bleaching



Direct composite mock-up



Dentine Bi2 shade selection



Enamel SW shade selection



Silicone palatal index try-in



Etched enamel surfaces.

Tooth #12 has been minimally prepared



Palatal shell fabrication with SW shade



Application of Bi2 and Amber effect shades



Application of SW enamel shade



Establishing a correct emergence profile with a transparent matrix



Establishing a correct emergence profile with a metal sectional matrix



Achieving a correct contour at the gingival level with the metal sectional matrix



Macro-morphology design

Removing the composite excess with a scalpel no. 15



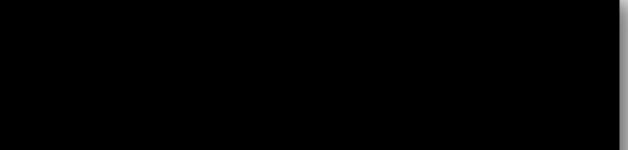
Meticulous polishing with 3-step rubber cups and brushes (Kerr, USA)



Latch-type laminated cups dipped in diamond polishing paste (Ultradent Co., USA)











Conclusions: The clinical success depends on the correct width measurements, the final contour and emergence profile of the restorations as well as the composite-enamel transition and luster of it. The presence of glycerin between the Inspiro Direct Shade guide tabs can minimize shade selection errors. A combination of metal sectional and transparent matrices is crucial to achieve a proper contour at the gingival level. Composite excess should be carefully removed with a scalpel from the enamel-composite interface. Finally, Latch-type laminated cups dipped in diamond polishing paste can be used for improved luster in the interproximal surfaces. References

1. De Araujo EM Jr, Fortkamp S, Baratieri LN. Closure of diastema and gingival recontouring using direct adhesive restorations: a case report. J Esthet Restor Dent. 2009;21(4):229-40. 2. Fahl N Jr. Achieving ultimate anterior esthetics with a new microhybrid composite. Compend Contin Educ Dent Suppl. 2000;(26):4-13; quiz 26. 3. Barros de Campos PR, Maia RR, Rodrigues de Menezes L, Barbosa IF, Carneiro da Cunha A, da Silveira Pereira GD. Rubber dam isolation--key to success in diastema closure technique with direct composite resin. Int J Esthet Dent. 2015 Winter; 10(4): 564-74.

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