

## Minimal Invasive Treatment of Maxillary Peg-Shaped Lateral: Case Reports

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**INTRODUCTION:** Lateral incisors, smaller than normal and shaped like nails, cones, wedges etc. can cause various problems. This case report describes three treatment approaches for patients with conical tooth anomalies applied with composite resin material.

**CASE DESCRIPTION:** Three patients aged 18, 22 and 20, having upper peg-shaped laterals applied to our clinic. It was decided to apply composite resin material using three different techniques: the free-hand method, silicon index and strip crown techniques. After rubber dam isolation the teeth surfaces were etched with 37% phosphoric acid (Scotchbond Universal Acid, 3M Espe) without any preparation on the teeth. The universal adhesive system (Scotchbond Universal Adhesive, 3M Espe) was applied. Optishade composite system, Medium (Kerr Dental) used in free-hand technique on the first patient teeth #12#11#21#22. Vittra APS composite system (FGM Dental) used in silicone index technique on the second patient's teeth #12 #22. G-aenial™ A'CHORD (GC Corp.) anterior composite system was used for strip crown application (TDV Dental) on the third patient teeth #12 #22. Finishing and polishing procedures were completed using polishing discs (3M ESPE) and polishing rubbers (Clearfil Twist Dia, Kuraray, Japan). The composite restorations were scored according to the Modified USPHS Criteria during the 6-month and 1-year follow-up. It was determined that there were no fractures, marginal discolorations, periodontal issues or secondary caries observed in the restorations.

**DISCUSSION:** It is essential to consider factors such as the patient's age, occlusal relationships, tooth size, patient's oral hygiene habits and the dentist's skill level.

**CONCLUSION/CLINICAL SIGNIFICANCE:** In these three case reports a minimally invasive, low-cost, aesthetic treatment option called composite resin material application was used to treat peg-shaped laterals resulting in both functional and aesthetic satisfaction in a single session

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## Treatment of Carious in Anterior Teeth with Resin Materials

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**INTRODUCTION:** In this case, we aimed to restore a maxillary anterior tooth with an interproximal caries using composite resin by minimally invasive approach and to rehabilitate white spot lesions on the buccal surface with resin infiltration technique.

**CASE DESCRIPTION:** A 14-year-old male patient was admitted to our clinic due to interproximal caries in the upper anterior region. After radiological and clinical examination, the cavitation was detected in teeth 11, 12 and 21 and then

planned with composite. Additionally, white spot lesions following the buccal cervical area in teeth 14-24 were planned with resin infiltration treatment (ICON, DMG, Germany). It was isolated with a rubber dam (Nictone, UK). The enamel surface was etched for 30-sec, the adhesive agent was applied and polymerised for 20 seconds. Universal composite resin (Optishade Universal Composite, Kerr, USA) was applied by free-hand modelling technique with the help of a fine-tipped mouth spatula (LM-Arte). After occlusion control, the finishing stage was completed. For white spots, 15% hydrochloric acid gel (Icon-Etch) was applied for 2-min. The teeth were washed with water for 30 s, dried and ethanol (Icon-Dry) was applied for 30-s. After the ethanol was air-dried, resin infiltrant (Icon-Infiltrant) was applied, waited for 3-min and polymerised with light for 40-sec. The teeth were finished and polished, the patient was scheduled for 1-month and 6-month follow-up appointments.

**DISCUSSION:** The patient's aesthetic expectation was fulfilled in a single session with direct composite restorations using simplyshade composite resin and resin infiltration treatment. At controls, according to USPHS (United States Public Health Services) criteria, all restorations were accepted ideal as clinical.

**CONCLUSION/CLINICAL SIGNIFICANCE:** The patient's cavitated teeth and white spot lesions were treated minimally invasively with simplyshade composite resin and resin infiltration technique.

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## Aesthetic And Functional Rehabilitation With Injection Moulding Technique

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**INTRODUCTION:** The injection moulding technique provides a minimally invasive approach offering a predictable and simplified treatment protocol to achieve functional and aesthetic outcome. The purpose was to provide minimally invasive esthetic and functional restorations using injection moulding technique on posterior and anterior wear teeth.

**CASE DESCRIPTION:** Loss of tooth structure due to attrition and/or erosion can lead to aesthetic and functional problems in patients over time. Two different cases (38 and 51 age) revealing vertical dimension deficiency and eroded palatal lesions. Transparent silicone index (Exaclear, GC Europe) was created from wax up models prepared by taking digital impressions. After rubber dam isolation, the tooth surface were prepared with ultrafine-grit aluminium oxide discs (3M ESPE Soflex). Teflon tape was placed adjacent teeth. 37% phosphoric acid (Condac 37, FGM, Brasil) and universal adhesive system (G-Premio Bond, GC Europe) was applied and light-cured. High filled flowable composite (G-aenial Universal Flow Composite, GC Europe) application was performed through the holes created for the