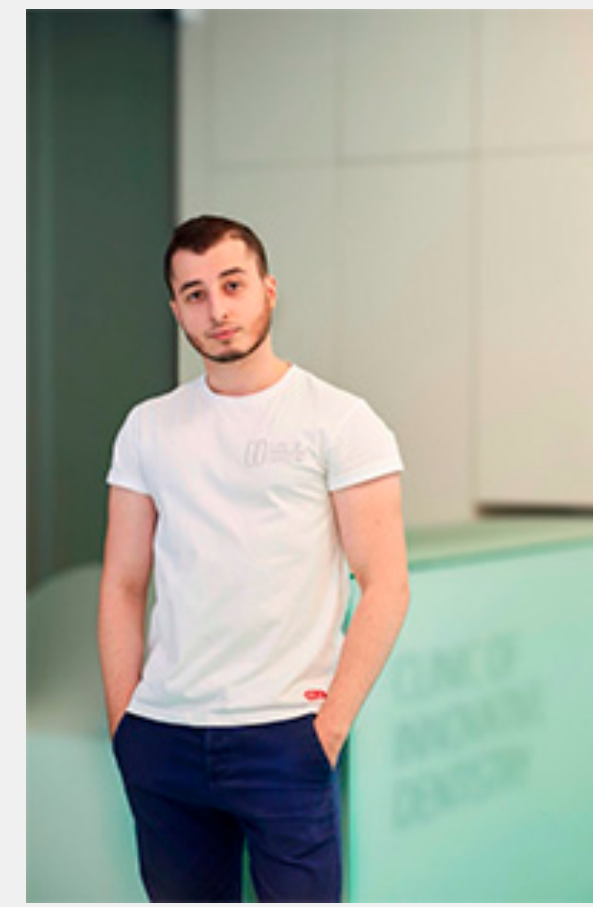


Global Clinical Case Contest 2019-2020



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Introduction to the case

A 27-years old male patient came to the Department of Cariology and Endodontics to solve his dental problems. The patient presents the old restorations on teeth 3.6, 3.7. An intraoral radiographic exam was performed pre-operatively in order to control the recurrent caries under defective restorations. After a comprehensive diagnosis was decided to remove carious dentine in teeth 3.6,3.7 and place durable restorations of sufficient bulk and resilience and ensure proper sealing.



Pre-operative picture showing old restorations on teeth 3.6 and 3.7.



Post-operative picture showing the new direct restorations.

Treatment steps



Step 1

Previous composite restorations have been removed using selective carious excavation to firm and hard dentine.



Step 2

Isolation of the operative area using the rubber dam. 37% phosphoric acid was applied to the enamel margins for 30 seconds and to the dentine for 15 seconds. Adhesive protocol was made with **Prime&Bond One ETCH and RINSE**.



Step 3

Placement of the **matrix system Palodent V3**.



Step 4

The marginal ridges and contact point reconstruction with **Ceram.X SphereTEC one A2**.



Step 5

The use of **SDR** as a liner. Dentine stratification with **Ceram.X SphereTEC A2** and supercolors.



Step 6

The oxygen-inhibited layer was removed with **Enhance polishing cup** and **Prisma Gloss extra fine**.



Step 7

Use of **Enhance** and the **Enhance PoGo** for finishing and polishing.



Step 8

Control of probable premature contacts by the use of articulating papers.

Material and Method

The operative area was isolated using rubber dam. The cavities were etched with 37% phosphoric acid gel. Adhesive protocol was made with the universal adhesive system **Prime & Bond One ETCH and RINSE**. **Palodent V3** matrix system was applied. The dentine layer was reconstructed with **SDR**. For reconstruction of marginal ridges and contact point and dentine stratification were used **Ceram.X SphereTEC A2**. The removal of the oxygen-inhibited layer was made with **Enhance polishing cup** and **Prisma Gloss extra fine paste**. On the latest steps of finishing and polishing were used **Enhance** and **Enhance PoGo**. Contact point was finished with low abrasive discs and strips.

Discussion and Conclusion

The restorations were performed in minimally invasive concept. Proper restoration of contact points is integral part of the adequate function and aesthetic of the dentition. Modern composite materials allow to create restorations identical to natural teeth in both aesthetic and functional aspects. The use of Palodent V3 matrix system gives an opportunity to reconstruct contact points in the best way.

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