A 21-year-old male patient presented complaining of sensitivity and mild pain when chewing on tooth #36. During examination, an under filled tooth with poor marginal seal and marginal discoloration was visible. The peri-apical radiograph indicated secondary caries.

After careful removal of the faulty composite restoration, the cavity was treated with the fluoride-releasing bonding system Fl-Bond II and restored with Beautifil Flow as a base and Beautifil fluoride-releasing materials (all SHOFU). Effect colours were used on the occlusal surface to mimic the adjacent tooth.

The main challenges in this case were the removal of the faulty composite restoration with minimal intervention of the healthy tooth structure and the mimicking of the occlusal anatomy and proper shade.
Fig. 3. Isolation of tooth 36 with rubber dam.

Fig. 4. Application of self-etching primer on the entire cavity.

Fig. 5. Uniform application of bonding agent and subsequent light-curing.

Fig. 6. Application of a thin layer of flowable resin on the cavity floor.

Fig. 7. Application of flowable opaque (#U0) to mask the discolouration.

Fig. 8. Build-up of the dentin layer, obtaining occlusal anatomy.
Fig. 9. Build-up of the enamel layer and carving of the pits and fissures to achieve natural anatomy.

Fig. 10. Application of dark brown stain on the pits and fissures to match adjacent tooth 7, and light-curing.

Fig. 11. Checking the occlusal contact with articulating paper.

Fig. 12. Reduction of the high points with Dura White Stone #FL2.

Fig. 13. Note the restored anatomy comparable to natural adjacent tooth.

Fig. 14. Restoration after finishing and polishing.