Inlays and onlays with a light-curing single-component material

A clinical case using Telio CS Inlay and Onlay from Ivoclar Vivadent

Treatment with ceramic inlays and onlays is becoming more popular in dentistry. Depending on whether the restorations are created chairside or labside, the prepared teeth may require temporisation. Telio CS Inlay and Onlay from Ivoclar Vivadent are two light-curing, single-component materials that allow the quick, straightforward and aesthetic temporisation of inlay and onlay preparations directly in the dental practice.

This report (Figs. 1–6) describes the fabrication method for a temporary Telio CS Inlay, including the desensitisation of the dentine surface with Telio CS Desensitizer and removal of the temporary before the try-in and insertion of the final restoration. Cerivet Liquid or Cerivet Gel (Ivoclar Vivadent) may be applied during the temporisation stage to ensure that the gingiva is inflammation free at the time of inserting the final restoration. This is particularly important if gingival tissue has been removed to expose the preparation margin prior to impression taking.

Generally, temporary restorations are fabricated either directly in the dental practice or indirectly in the laboratory. When direct temporary restorations are fabricated, a light-curing, single-component material, such as the well-established Fermit (Ivoclar Vivadent), is applied into the preparation and then the temporary restoration is shaped directly in the oral cavity. By contrast, indirect techniques use a pick-up impression taking. The impression is then used to fabricate the temporary restoration with a self-curing composite (e.g., Telio GS GR). CAM/CAD materials (e.g., Telio CAD) are also used for indirect temporisation. Fabrication methods aside, all temporary restorations fulfil the same clinical function: their purpose is to shield the dentine, preserve occlusal stability and proximal support, provide protection against gum irritation, and establish dental integrity, aesthetics and phonetics.

Direct temporary techniques appear to be particularly advantageous in conjunction with delicate inlay and onlay preparations. Applying a light-curing single-component material is significantly easier and less time-consuming than using an indirect technique. Indirect methods are mainly applied for the fabrication of large temporary restorations. Furthermore, the direct method offers the essential advantage that the material adheres to the dental surfaces by itself, eliminating the need for an additional temporary cement.

Telio CS Inlay and Onlay offer excellent properties tailored to their specific field of application. Telio CS Inlay is suitable for the temporisation of parallel-walled inlay preparations, relining of prefabricated temporary crowns and the sealing of implant screw access holes. Telio CS Onlay features a less elastic consistency than Telio CS Inlay and is particularly indicated for the temporisation of large preparations. Both materials demonstrate low stickiness to modelling instruments whilst offering excellent adhesion to the prepared tooth structure.

Telio CS Inlay and Onlay are easy to shape and process in the oral cavity. They offer a sufficiently long working time and the completed direct temporary can be light-cured with a short polymerisation time of 10 seconds. In the process, a high curing depth is achieved. An antimicrobial substance is added to the materials to prevent the risk of unpleasant odour formation.

Temporary restorations made of Telio CS Inlay and Onlay can be removed in a single piece. As an additional advantage, Telio CS Inlay and Onlay do not adversely affect the adhesive bond of the final restoration. Moreover, they allow the application of a desensitiser, Telio CS Desensitizer, to prevent hypersensitivities during the temporisation stage.

Telio CS Inlay and Onlay are available in two shades (translucent and universal) and two delivery forms: syringes and Cavifils for improved intra-oral application.