Prefabricated veneers: A hybrid technique for easier (and more affordable) aesthetic results

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Some time ago, the creation of direct composite restorations was a dream still to be achieved. Back then, composites lacked even some basic optical properties of teeth. By the end of the 1990s, this scenario changed as manufacturers of composite resins began to improve the materials’ optical properties. Composite resins started to be manufactured in a greater range of shades both for enamel and dentine and with enhanced optical properties.\(^1\)\(^2\)

However, such a wide variety of shades can make it difficult for the dentist to make an accurate shade selection during the restorative procedure. Sadley, achieving like-like results with a direct layering technique is only mastered by a few owing to its significant learning curve. This is especially true when it comes to the direct veneering of anterior teeth.

The veneering of anterior teeth was first proposed in 1937.\(^3\) Almost 40 years later, the technique was revisited, unsuccessfully, owing to the materials’ limitations (methylmethacrylate matrix and large glass fillers), which led to rapid loss of surface gloss and surface degradation.\(^4\) With the advent of bonded porcelain veneers, which also have the advantage of an individual fabrication process, the concept of pre-fabricated veneers was practically abandoned until now.

New materials and advances in technology (dentine bonding, increased resin-filler ratio, and light curing, to name a few) allowed a re-birth of the concept of prefabricated veneering for the anterior teeth.\(^5\) The aim of this article is to present a case in which six anterior prefabricated composite veneers were placed to achieve optimum aesthetic results.

Case report

A 56-year-old male patient with several aesthetic discordancess in his anterior teeth presented for treatment for aesthetic purposes. Figure 1 depicts the situation before the treatment, showing large restorations with loss of natural tooth anatomy and colour, and a non-vital, discoloured tooth (maxillary left central incisor) owing to an endodontic procedure years ago.

The patient also wanted to resolve the diastemata. Another request from the patient was that the teeth not have an artificial appearance after treatment, in other words, that the final result blend with the natural dentition to resolve not only shape but also colour. In this case, this was particularly important, since his teeth presented a very rich colour shift: darker and more colourful in the cervical region, and much more translucent and less colour in the incisal region.

After various treatment options had been discussed, veneering the anterior teeth with a novel prefabricated composite veneer called Edelweiss (Ultradent) was selected. This system offers the clinician a one-vision alternative to directly placed composite veneers and is a good option compared with ceramic veneers, which were rejected by the patient for financial reasons.

The veneers are made from composite, but they undergo pressure and thermal temperation during the fabrication process. This allows for very strong and thin veneers (facial surface around 0.5 mm, but thinner on the cervical and thicker on the incisal edge). They also pass through a laser vitrification process, through which a pure, inorganic glass surface, homogenous and smooth like a ceramic surface, is achieved, providing an excellent gloss.

First, the gingival tissues were first removed the tooth structure (a thin layer of enamel) and it was placed both directly on the tooth surface, the cemen- tum and at the back of the Edelweiss veneers. In order to achieve a natural colour transition, shades A4, A3 and A2, and a final translucent shade called Trans Gray were applied in the back of the ve- neers in waves, beginning with A4 in the cervical region and finishing with Trans Gray in the incisal region.

The whole process proved to be faster and easier than what was initially expected. Composite colour adaptation in the interproximal areas was very good, and it was performed with an enamel colour called Enamel Neutral. The same colour was used in the cervical re-

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