A 30-year-old female patient with porcelain veneers on teeth 1.1 and 2.1 came to the office wishing to improve the shape and color of tooth 1.3 (Img. 1). The patient had right maxillary lateral incisor agenesis, and therefore her canine had been transformed with composite resin into a lateral incisor. However, the restoration had undergone discoloration over the years, and seemed to be too big as the aim of the previous restoration was to close a diastema.

The issue consisted in the type of material to propose to the patient: would porcelain veneer be the best choice?

Of course it is a possible possibility, but it would be very demanding for the dental technician to make a single, asymmetrically positioned porcelain veneer. He would have to spend many hours, probably remaking it many times in order to obtain a similar shade to the neighboring teeth. It is also challenging to make the tooth look smaller and close the diastema at the same time, as in many cases porcelain restorations may make teeth appear bigger.

Treatment Plan: direct composite veneer was planned and a silicone guide was made from a mock-up.
Fig. 1 – Intraoral photo of the original situation. You can see the porcelain veneers on teeth 1.1, 2.1.
Fig. 2 – The previous restoration was removed and a minimal invasive veneer preparation was obtained.
Fig. 3 – Then the rubber dam was placed, using the modified Hygenic Brinker clamp B6 (Coltene).
Fig. 4  Img. 4 – The entire preparation was totally etched.
The tooth was then meticulously rinsed with water spray and gently dried before a bonding agent (EnaBond, Micerium) was placed in two layers and polymerized.
Fig. 6 – A small amount of composite resin was placed onto the cervical area in order to better retain the rubber dam, and an interdental floss was attached tightly to the plastic rubber dam frame to facilitate the following composite layer placement (Img. 6, 7, 8).
Fig. 9 – This way the silicone guide did not interfere with the rubber dam clamp.
Fig. 10 – The silicone guide was partially incised (mesioapproximately to tooth 13) in order to place the piece of BlueView Varistrip (Garisson), inside the groove, and in this way to provide the optimum curvature of the proximal contact surface (Img. 10, 11).
Img. 12 – An enamel layer of composite resin (UE2, Enamel Plus, Micerium) was placed onto the silicone matrix…
...and then positioned on the tooth. The material was afterwards spread proximally and incisally (Img. 14), followed by 20 s light polymerization.
Fig. 15 – Then dentin mass was applied to mimic the mamelons (UD2, Enamel Plus, Micerium) and a very small amount of lighter dentin composite resin was placed incisally (UD1) in order to mimic the halo effect, followed by light curing (Img. 16).
Fig. 16 – The layer of dentin was checked before polymization using the LM Arte Misura instrument in order to ensure the appropriate volume for the outer layer enamel.
Fig. 17 – Finally, enamel layer (UE2) was applied to the entire outer surface and polymerized.
The final characterization was performed by means of a perioddrill shaped bur (no. 831-204-012, Komet) according to the method described in the book “Layers: An Atlas of Composite Resin Stratification” by J. Manauta and A. Salat. Final polishing was performed with a goat hair brush (RA Shiny S, Micerium) and polishing pastes (Polishing Paste Shiny Kit, Micerium).
Fig. 19 – The final effect of tooth 1.3 restored with direct composite veneer is shown (Img. 19, 20).
Fig. 21 – Before (left) and After (right) pictures, the patient’s smile.
Conclusions

Porcelain veneers are a generally accepted and popular method for anterior tooth restoration due to the possibility of excellent aesthetics, function (anterior and canine guidance, phonetics) and biological integration of the restoration. However, in order to achieve clinical success with porcelain veneers, several conditions need to be fulfilled. These include valuable and well designed tooth preparation, precise veneer fabrication in the laboratory, and cementation with rubber dam in place according to strict adhesive procedures. When asymmetric restoration is needed, it is extremely difficult for the dental laboratory to obtain predictable aesthetics and shade. With recently introduced techniques based on quantitatively added layers (Silicone guide, Misura instrument, My Shade Guide) it is possible to achieve a direct composite restoration that is predictable in regard to aesthetics and shade selection. As it takes only one appointment and does not involve laboratory procedures, it is more economical for both the patient and the dental practice. Another advantage is reparability, which is relatively easy and usually involves only a short appointment but would be quite difficult or sometimes impossible in the case of a porcelain veneer repair. The author of this case report does not wish to assert that composite veneers are better in most cases, but they certainly can be the preferred option in many cases of contemporary dentistry.