Maxillary diastema closure would very often require an interdisciplinary approach. The less invasive therapy for the volumetric and dimensional deficiencies of teeth is the additive-only procedure with prep-less or no-prep porcelain veneers. In the cases when the dimensional deficiencies result in different sized space distribution, several choices are at the disposal for the clinician. Nowadays, according to the modern minimally invasive approach we make an effort to damage the teeth as less as possible. In order to manage the distribution of diastemas and their size with conservative techniques and based on interdisciplinary approach the involvement of an orthodontist in the treatment is reasonable. In this approach there is a chance to anticipate the irreversible consequence of the extended preparations.

The no-prep veneers (prep-less veneers – PLVs) are feasible alternatives to the conventional prosthetic treatments or to the direct adhesive restorations because there is no need for preparation, so the enamel can be fully preserved. The latter ones due to their color effect and the surface alteration provide in all cases compromise solutions in the long term.

In the case of no-prep veneers the thickness â€” due to the refined materials and techniques â€” is 0.1-0.2 mm, but it can be even less. The finely drawn porcelain margins vary between 50-120 microns, depending on the nature of the surface of the area where they are to be extended.

With the use of the modern polishing tools the thickness of the margins can be decreased to a pleasing level even after adhesion, if it is necessary.

It is misbelieved that the preparation of no-prep veneers is easier and quicker. Due to the lack of prepared orientative outlines as well as the thinness of veneers, fabrication of high-quality no-prep veneers are more time consuming for both the dentist and the technician. The thinness of the veneers, in case of the partial veneers for their size as well, the final color effect and
the perfection of the optical effects are all a big challenge. Achieving compromise free results requires expert knowledge from the side of laboratory concerning the type of the used ceramic as well as the optical features attainable in this thickness (thinness!).

Applying and positioning them also ask for high attention, since the adhesion process is an irreversible procedure. Any kind of failure, inaccuracy can lead to the removal of the veneers which cannot be called either conservative or non-invasive.

The case presented in the article is a 32 years old woman concerned with multiple upper diastemas, dental midline deviation and Bolton discrepancy localized on the frontal region reported to the dental office. The malformations in size at the upper teeth, the diastemas of asymmetric distribution and dimension required a combined ortho-restorative treatment.

A Bolton analysis revealed the size of discrepancy as well as their extension in the sagittal and vertical dimensions. These data and the functional features of the adjustment of canines determine the planned orthodontic movements and in the long run the consecutive restorative treatment.
Fig. 2  Main stages of the orthodontic treatment: prior to bracket bonding; during the levelling phase; prior to bracket removal.
Being a classical cosmetic case the dentist decided to send the patient to me for choosing tooth colour. Every step of the workflow required a high precision the creation of the working model already. The real challenge was the planning of the layering and the choosing for it the right materials. I used 9-10 powders of IPS e.max Ceram layering ceramic. After thorough preparation the layering on the refractory die went quickly. The removal of the investment material required high concentration. I had focus on the appropriate sequence of the restorations not to cause any dilemma to the dentist with the cementation of the veneers.

Fig. 6

Fig. 7
Main steps of cementation procedure. Impression, isolation and try-in, etching, bonding, cementation, excess removal, light curing, finishing, retraction cord removal.

Try-in.
Fig. 10  Isolation.
Etching and bonding procedures were carried out, one by one, with the help of many tools such as anterior dam clamps, wedges and teflon tape. Cementation was done using Variolink Veneer cement (Ivoclar Vivadent).
Fig. 12  Light curing.
Excess removal and finishing.
Retraction cord removal.
Final status. Prep-less ceramic fragments in situ. Immediate postoperative clinical appearance.
Fig. 16
Fig. 19
Fig. 20 Two years follow-up. Proper balance of shade, contour, form and occlusion was obtained. Periodontal tissues are healthy, no pocketing or retention was detected.

Fig. 21
When preparing no-prep veneers the periodontium of the patient has to be much accentuated. This alternative shall be used only in case of pocketing and recession free status as well as in case of outstanding oral hygiene. The most powerful contra-indication found in the literature for application of the no-prep veneers is the over-contouring as a plaque retention area appearing as a result of the lack of preparation.

The traditional application of the veneers provides perfect final solution in each case, but it results in damage of tooth material, that is irreversible. In case of careful examination and planning the no-prep sectional veneers are perfect treatment alternatives for deficiencies of such type.

The 2-year long follow-up confirms that neither esthetic nor periodontal deformations have appeared around the veneers. In case of adequate indication, the perfectly implemented no-pre segmented veneers being well-treated by the patient ensure a perfect final clinical and esthetic outcome in the long term.