It is a known entity that bulimia nervosa can cause quite a rapid deterioration of tooth tissues. This is also happening as we see in the modern world, as a sort of an epidemic, due to the amount of acid to which teeth are exposed. This is due to high consumption of fizzy beverages containing acids, high sugar content drinks like fruit juices and also individuals with very frequent consumption of low pH food like chewing and sucking on lemons. Quite often, dentists are the first health professionals to recognize the effects of bulimia nervosa.

The teeth become thin, chipped, weak, fragile and sensitive. It affects the well being and self esteem of an individual. In severe cases, full-coverage crowns may be the only option. But if detected earlier they can be treated more conservatively.

AN ADHESIVE APPROACH

As an alternative to preparing and placing full coverage crowns, one can place facial and palatal veneers as a conservative approach. This enables a clinician to preserve a fair bit of interproximal and incisal tooth tissue which is the goal in today’s world of conservative dentistry.
Fig. 1 – A patient, 42 year old woman came complaining of tooth sensitivity.

On clinical examination and also based on the the history that the patient told, she is a performance athlete and was consuming a very high amount of energy or sugar drinks every day. She had a skeletal and dental Class 2 with a 3 mm over-jet.

She had some bonding procedure done on the labial side and was only keen to find a conservative solution to her existing clinical situation.

No preparation of the teeth was done. They were cleaned and impressions were taken with the aid of a double retraction cord technique using polyether impression material (Impregum, 3M Espe).

A split cast was made in a laboratory.
Fig. 2 – Four composite resin veneers were fabricated using a body shade (Filtek Supreme XT, 3M Espe) and were polished. The choice of composite as the restorative material was due to the high stress area, where a ceramic veneer would be prone to chipping and breakage. The composite resin also offers the possibility to be repaired in case it is needed.
Fig. 3  Img. 3 – It was ensured that veneers well adapted to the model and were adjusted in occlusion as well.

Fig. 4  Img. 4 – The composite veneers were sandblasted and then silanized for 2 minutes, after confirming the fit during try-in in the mouth. The bonding protocol was the same as if placing facial veneers. The teeth were isolated using
teflon from the adjacent teeth. The tooth structure to be bonded was sandblasted using 27 micron Aluminum Oxide (CoJet, 3M Espe) to increase the surface area for greater retention and bond strength. A total-etch bonding technique (Single Bond, 3M Espe) to seat the lingual veneers with flowable composite (Filtek Supreme Flow, 3M Espe). Some stains were added in the lingual grooves (Coltene). A final cure was done after applying air blocking water soluble gel to the teeth. They were then adjusted for occlusion and a final polish was done using polishing rubbers and brushes with a diamond polishing paste. During the following appointment the canines were covered with a thin layer of direct composite bonding according to the space available.

Fig. 5 – A photograph of a 4 year follow up with no finishing or polishing procedures done after rehabilitation shows a very successful treatment protocol.

Conclusions

This treatment enabled the achievement of a number of goals.

1) Maximum preservation: it was the most conservative treatment approach.
2) Space management, since an indirect technique was used, it was easy to control form and shape of the veneers.
3) Low cost, as it was fabricated in the office.
4) Ease of fabrication, due to the use of a direct restorative material; the handling was easy and, if needed, it will be convenient to repair.

In conclusion it can be said that these are clinical situations which the dental profession is seeing more and more of even in early stages of an individuals’ lives due to changes in dietary habits. A conservative treatment like the one shown above should be considered before one thinks of taking off too much of tooth tissue.