Class II fillings in everyday clinical work

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Making proximal cavity fillings requires a rigorous clinical procedure that must be easily reproducible. The aim is to obtain a dental morphology that reconstructs a tight contact point and avoids future food impaction. Another very important goal is respecting the anatomy and physiology of the patients’ interdental papillae, as well as guaranteeing the balance and integrity of the proximal space.

Compression of the papillae

It is much more difficult to obtain a good contact point with composite compared to amalgam because of the way composite material needs to be light-cured. If the proximal matrix does not have a good adaptation to the tooth, then too much compression on the composite filling material will result in cervical overhang. This in turn will compress the interdental papillae and may cause periodontal damage to the patient’s tooth (Figs. 1 & 2).

The matrix

It is easy to understand the importance of the role of the matrix both in forming the filling proximately and channeling the filling material to the correct position. Directa’s FenderMate matrix perfectly fulfils the clinical needs of completing Class II cavities (Figs. 3 & 4). The concept of a steel plate and plastic interdental wedge in one piece was initially introduced by Directa in the concept of FenderWedge, a device for protecting the adjacent tooth during preparation, and replicated under the name FenderMate as a matrix system. The aim is to facilitate the insertion of a wedge and an anatomically adapted matrix at the same time.

The matrix can be removed in two stages. The interdental wedge, which separates from the steel matrix, can be taken out first and the steel matrix can then be removed next. The matrices are available in two sizes—narrow and regular—and for right and left application. They are colour-coded—green and blue—for ease of identification. FenderMate may be applied either buccally or lingually.

The contact point

The interdental wedge with a flexible wing keeps the lower part of the matrix in contact with the cervical walls of the cavity. This causes a slight separation of the teeth so that when the filling is made, it is slightly larger than usual in the proximal direction. Once the matrix has been removed, the patient’s teeth will return to their natural position, assuring tight contact between the proximal spaces with the adjacent tooth.

The matrix’s convex shape positions the interdental contact point in the highest third of the tooth and creates a papillary splay compatible with the physiology and the natural interdental space for cleaning. The curved shape of the combined matrix and interdental wedge forms the matrix around the buccal and lingual limits of the cavity box, and the pre-shaped contact former creates a natural contact point on the patient’s tooth (Figs. 5–7).

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