THE USE OF A CERAMIC FRAGMENT FOR A DIASTEMA CLOSURE: CLINICAL CASE

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CLINICAL CASE DESCRIPTION: Male patient, healthy, aged 23, previous orthodontic treatment, unhappy with the aesthetics of his smile (Fig. 1). Following anamnesis and a clinical and radiographic evaluation, multiple caries lesions, teeth showing amelogenesis imperfecta and an antero-superior diastema were diagnosed (Fig. 2 - 4). Treatment plan involved an at-home dental bleaching, the aesthetic restorative treatment with composite resin of the caries lesions and teeth with amelogenesis imperfecta as well as a ceramic mini-veneer to close the diastema between teeth 12 and 13 (Fig. 5 - 6).

Fig. 1 - Initial intra-oral photo

Fig. 2 - Initial intra-oral lateral photo

Fig. 3 - Initial Close-up

Fig. 4 - Intra-oral incisal perspective photo

DISCUSSION: Ceramic and composite are used in dentistry due to their ability in providing aesthetic results that mimic natural teeth. Ceramic is a biocompatible material, enabling the proper light reflection/ transmission (1) (Fig. 7). The cementation protocol is currently well documented (2) (Fig. 8 - 9). The correct treatment planning allows to maintain the color and shape stability (Fig. 10 - 11), displaying good mechanical strength when subjected to masticatory forces. (3).

Fig. 5 - Ceramic fragment in the model

Fig. 6 - Cosmetic contouring

Fig. 7 - Try-in of the ceramic fragment

Fig. 8 - Sequence of the ceramic fragment preparation protocol

CONCLUSIONS: Through this treatment, the rehabilitation of the function and aesthetics of the smile was possible (Fig. 12 - 14). Ceramic fragments are an excellent choice due to their minimally invasive procedure and highly esthetic results.

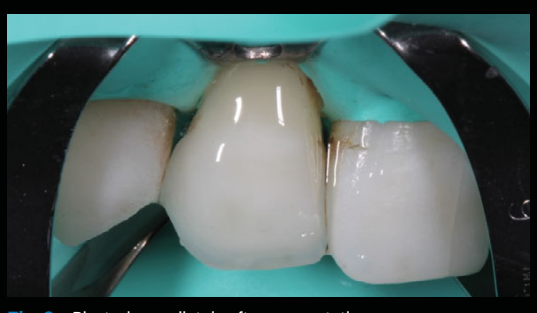

Fig. 9 - Photo immediately after cementation

Fig. 10 - Close-up after cementation and removal of rubber dam

Fig. 11 - Extra-oral photo after cementation

Fig. 12 - 6 months follow-up

Fig. 13 - 6 months close-up follow-up

Fig. 14 - Final smile photo - 6 months follow-up

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