Clinical conduct for restoration of non-caries cervical lesions – Case report

By Dr. Raphael Monte Alto, Dra. Madelaine Torres da Silva, Dra. Amanda Vaz dos Reis, Dr. Gustavo Oliveira dos Santos, Portugal

Non-carious cervical lesions (NCCL) are characterized by loss of dental structure near the cementoenamel junction, which may extend to the coronal and radicular portion, and by an association with dentin hypersensitivity and gingival recession. NCCLs are not related to caries and their etiology is multifactorial, including both endogenous and exogenous factors related to the processes of bioerosion, tension and friction. NCCLs mainly affect the vestibular surface of the molars and premolars and are frequently observed in clinical practice. This report aims to describe the case of a 45-year-old male patient identified as ALMM and treated in the integrated clinic of the Faculty of Dentistry of Universidade Federal Fluminense with a main complaint of dental wear.

Clinical examination revealed NCCL and gingival recession in elements 11, 12, 13, 14, 15, 16, 33, 34 and 35, with no complaint of dentin hypersensitivity. Rehabilitation treatment through NCCL restorations using composite resin was proposed, starting with anterior teeth; then, rehabilitation with removable partial dentures was performed. The patient will be followed up and there will be a thorough investigation to control the etiological factors involved, thus enabling treatment success.

This case was realized at UFF (Universidade Federal Fluminense) with the following Team:

Dr. Raphael Monte Alto
Dra. Madelaine Torres da Silva
Dra. Amanda Vaz dos Reis
Dr. Gustavo Oliveira dos Santos

For further information, please contact:
Coltène/Whaledent AG
Feldwiesenstrasse 20
9450 Altstätten SG
Switzerland

Fig. 1: Initial appearance of NCCL (frontal view)
Fig. 2: Initial appearance of NCCL (proximal view)
Fig. 3: Absolute isolation performed
Fig. 4: Long diamond tip FF bevel on cervical enamel
Fig. 5: Long diamond tip FF bevel on cervical enamel
Fig. 6: Long diamond tip FF bevel on cervical enamel
Fig. 7: Long diamond tip FF bevel on cervical enamel
Fig. 8: Prophylaxis with pumice and water
Fig. 9: Selective enamel acid etching (acid application for 30 seconds)
Fig. 10: Rinse with water for at least 30 seconds
Fig. 11: Appearance of the enamel after acid etching
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Fig. 12: Active application of ONE COAT 7 UNIVERSAL adhesive on dentin and enamel.

Fig. 13: Active application of ONE COAT 7 UNIVERSAL adhesive on dentin and enamel.

Fig. 14: Active application of ONE COAT 7 UNIVERSAL adhesive on dentin and enamel.

Fig. 15: Photopolymerization of the adhesive.

Fig. 16: Measuring the depth of the lesion. Lesions up to 2 mm deep can be restored with a single increment.

Fig. 17: Composite resin is selected (BRILLANT EverGlow – COLTENE).

Fig. 18: Application of composite resin.

Fig. 19: Application of composite resin.

Fig. 20: Application of composite resin.

Fig. 21: Application of composite resin.

Fig. 22: Removal of excess material using No. 12 scalpel blade.

Fig. 23: Appearance after removal of absolute isolation.

Fig. 24: Polishing of the cervical margin using flame tips (DAITECH System – COLTENE).

Fig. 25: Initial finish with lilac spiral (DAITECH Shapeguard – COLTENE).

Fig. 26: Initial finish with lilac spiral (DAITECH Shapeguard – COLTENE).

Fig. 27: Final polishing with blue spiral (DAITECH Shapeguard COLTENE).