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15:00

**OPTICAL COHERENCE TOMOGRAPHY AND SCANNING ELECTRON MICROSCOPY ANALYSIS
OF MICROABRASSION EFFECTS IN DECIDUOUS TEETH ENAMEL**

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The objective of this work was to study the effects of microabrasion in deciduous teeth enamel. The microabrasion was done in a vestibular surface of health deciduous teeth (n=68) with 3 different materials: (A) phosphoric acid with and extra-fine pumice; (B) Opalustre® and (C) Whitniss RM®. Each application was accomplished with rubber cup and contra-angle handpiece by 10s, under controlled pressure and rotation. The teeth were submitted to Optical Coherence Tomography and Scanning Electron Microscopy analysis at 500 and 1000µm from the center of the rubber cup after 0, 3, 5, 7 and 10 applications. It was observed at 500µm of the center it was smaller than at 1000µm in the material (A) after 10 applications; the material (A) presented smaller values of waste at 500µm after 7 and 10 applications and at 1000µm after 10 applications; at 500µm after 3 and 5 applications material (A) have less waste than material (B), but it didn't differ from material (C); The materials (B) and (C) presented larger waste values. In conclusion, the microabrasion with Whitniss and Opalustre materials have the largest waste values, and could be recommended for deciduous teeth. The phosphoric acid didn't present values of waste, suggesting new studies with this material. The materials promoted pattern of conditioning type I and II. And the OCT technique was able of mensurar the waste promoted in the substratum, and could become an important clinical tool in the control of waste of dental enamel.