

Oral Presentation

(unlike the other groups). All cavities received Clearfill SE Bond application and Z100 composite resin restoration. After 24h, teeth were polished, submitted to 500 thermo-cycles (50-55°C), sealed (Araldite and cosmetic varnish - except for the restoration and 2mm around it). Samples were immersed in 2% methyl-blue dye (4h) then sectioned in buccolingual direction to be later evaluated by scores (0-3) according to the degree of microleakage. The results showed no significant differences among the studied groups nor between the evaluated restoration margins (Kruskal-Wallis, $p < 0,05$). In conclusion, it was found that the use of the clorexidine didn't negatively interfere on the adhesion process whether in CB or Er:YAG laser prepared cavities, when resorted to using the studied self-etching adhesive system.

OP79

Effects of Nd:YAP laser on dentin permeability after endodontic preparation: a scanning electron microscopic study.

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Mestrando em Bioengenharia UNIVAP .

This study evaluated in vitro the capacity of reduction of dentin permeability using the Nd:YAP laser (1340nm) after endodontic preparation. For this purpose, 30 human teeth were prepared by serial technique with 0,5% sodium hypochlorite and final irrigation with EDTA-T and then divided in three groups: GI- control group; GII- laser parameter I (5Hz; 0,9W; 180mJ) and GIII- laser parameter II (5Hz, 1,8W, 360mJ). After endodontic preparation of all groups and irradiation of GII and GIII, specimens had been split longitudinally and one hemiface of the canal was submitted to SEM (Scanning Electron Microscope) analysis. Less amounts of open tubules had been observed in the irradiated groups when compared with control group. Use the Nd:YAP laser was effective in the reduction of dentin permeability.

OP80

In vitro and in vivo evaluation of deciduous teeth whitening technique - The diode laser and light cure.

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A great number of children suffer from traumatic injuries on the deciduous dentition. The darkening resulting from these injuries create an aesthetic problem in these children in the middle of their psychosocial development. The whitening technique might be a satisfactory aesthetic resolution, as well as non-invasive. The objectives of the present study were to evaluate "in vitro" and "in vivo" the teeth color variation and superficial temperature, obtained by the thermocatalytic technique used in devitalized human deciduous teeth, as well as evaluate "in vivo" the teeth color variation obtained by the whitening. The whitening agent was the hydrogen peroxide 35%, having as a variant the source of catalyzing energy- diode laser and the light curer. 21 deciduous teeth were utilized. The light curer group-11 teeth and the laser group, 10. The color evaluation was carried out by the spectrophotometer and VITA 3D scale. After statistic analysis, it can be concluded that the whitening was verified by both methods. The temperature variation was significantly higher in the light cure group than in the laser group.

OP81

The antibacterial effect of Nd:YAG Lasers in Endodontic therapy - Study in vivo.

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The aim of this study was to evaluate the antibacterial effects of Nd:YAG lasers in endodontic therapy. Twenty-four teeth with the diagnosis of asymptomatic apical periodontitis were selected . In group I, conventional endodontic instrumentation was performed. In group II, after instrumentation, intracanal Nd: YAG (ADT-SOL) laser irradiation was done (1.5W and 15Hz, (1mm/sec), 10 irradiations with intervals of 30 seconds. Microbiological sampling was taken from the root canals before and after instrumentation the 1st appointment. The root canals were then left empty for 7 days when a third sampling was taken. (The samples were anaerobically cultivated. Microorganisms were evaluated in accordance to number of strains recovered and the CFU (colony form units) based on a graduation of low, moderate and high growth. Microorganisms were isolated from 23 (95,8%) canals during the first collection. Obligate anaerobic bacteria were recovered in 90,9% of the cases and facultative-aerobe in 43,47%. Nd: YAG laser irradiation (Gr. II) reduced the number of intracanal microorganisms following instrumentation and one