

Oral Presentation

including water, coffee, perfumes, cleaning products and other substances present in their daily lives and gustatory tests with different solutions and concentrations of Glucose, Urea, Sodium chloride and Citric acid.

Results: The results showed that there was an improvement in the taste and smell recovered in both treatment groups. In LG 34.5% had taste and smell recover above 80% and 17.2% had total recovery. In the LBG 65.8% had recovery above 80% and 34.2% had total recovery. There was no significant association between the groups and the patient's sex, covid symptoms, disease severity and hospitalization, age, taste and smell change time, time between the disease and the start of treatment, number of sessions and treatment time ($p > 0.05$).

Conclusion: Regardless of the patient's covid history, photobiomodulation proved to be effective in recovering smell and taste, presenting better results when the local treatment modality is associated with blood photobiomodulation.

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Category: In vitro

Title: EVALUATION OF THE EFFICIENCY OF DEBONDING CERAMIC LAMINATES WITH THE AID OF Er,Cr:YSGG LASER IN DIFFERENT AVERAGE POWER PARAMETERS

Aim: Due to frequent aesthetic rehabilitations in modern dentistry with the use of lithium disilicate laminates (LDL), and the unfortunate need to replace them, it is necessary to define a safe protocol for removal veneers. The study aims to assess the efficiency of debonding lithium disilicate ceramics using varying laser irradiation power levels, focusing on the resulting morphological, optical, and chemical changes in enamel across different treatment protocols.

Material and methods: Thirty human molars were sectioned, resulting in 60 enamel blocks of 4x4x3 mm, embedded in thermoactivated acrylic resin. After sanding and polishing, the samples were subjected to the KNOOP surface hardness test, to standardize mineral content, before SEM, OCT and FTIR analyses before cementation of the laminates. The 60 samples were divided into 2 groups ($n = 30$) according to the cement used

and into 2 groups with two powers and control group without laser irradiation ($n = 10$). Group 1 was cemented with Variolink Esthetic LC (Ivoclar), group 2 with Relyx Ultimate (3M). The dimensions of the LDL laminates were 4x4 and 0.7 mm, shade A1. The Er,Cr:YSGG laser were WaterLase (Biolase, San Clemente, USA), $\lambda = 2.78 \mu\text{m}$, 140 μs pulse width and 20 Hz repetition rate, 0.6 sapphire laser tip mm MGG6-4 mm (with 60%-40% air in relation to distilled water) emitting 5W, 88,4 J/cm², and 5.5W, 97,26 J/cm² laser irradiation 1,8KW/cm² and 2KW/cm². After laser irradiation, the samples were subjected to shear testing and evaluated by SEM and classified for adhesive failure by the ARI (Adhesive Remnant Index) test. After debonding, the initial and final SEM, OCT and FTIR were compared.

Results: The results showed that residual remains of cement were present in all samples, and no group achieved a score of 0 in the ARI. After laser irradiation, the adhesive failure pattern changed, as indicated by the ARI test and observed in the SEM. The FTIR shows that the intensity of the phosphate and carbonate bands decreased after laser detachment, and the presence of resin cement bands is evident. The interaction between the ceramic and the laser is low when compared to resin cements.

Conclusion: Er,Cr:YSGG laser debonding was effective for all groups, causing ablation of the resin cement without causing damage to the enamel structure. As observed, the failure pattern changed to cohesive (<50% cement on the enamel surface). The average power of 5.5 W was more efficient and significant for Variolink cement.

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Category: Preclinical

Title: EFFECT OF ANTIMICROBIAL PHOTODYNAMIC THERAPY MEDIATED BY TOLUIDINE BUTYL BLUE ON THE PREVENTION OF MEDICATION-RELATED OSTEONECROSIS OF THE JAWS: PRECLINICAL STUDY IN SENESCENT FEMALE RATS

Aim: This study evaluated the effectiveness of antimicrobial photodynamic therapy (aPDT), mediated by butyl toluidine blue (BuTB) in the prevention of MRONJ after tooth extraction in rats.