Electrocautery (Novadur Bayer/Cauterimax, nickel chromo tip, 18cm filament, with a temperature of 1,200°C, irradiation in continuous mode, and over an area of 1cm) and G2. High Power Diode Laser (Thera lase/DMC, infrared waveform 808nm, equipment power 9W, continuous irradiation, power 1.5-2W, fiber diameter 600 micrometers). Clinical evaluation, use of the Bristol protocol, breastfeeding evaluation by UNICEF, and application of the VAS pain test for nursing mothers simultaneously, it was methods and assessment. The evaluation times were before and 15 days after the surgical procedures, by the operator and the blind dentist. The incision was made in the same way using both instruments. After 15 years, a was new evaluation, and in cases of recurrence, reoperation was necessary.

Results: After surgery, recurrence occurred in 26 cases (45.6%). There was recurrence in 6 cases (26.6%) in G.Electrocautery and 20 cases (58.8%) in G.Laser. Local inflammation was noticed at the edges of the surgical cut in 4 cases in G.Electrocautery and none in G.Laser

Conclusion: Although the G. high-power diode laser presents more cases of recurrences (58.8%), the 26.6% recurrence presented by the G. Electrocautery is considered very high, and it is not possible to change the parameters with this instrument, while with the laser it is possible to adjust the parameters according to each case. After this study, we know that the parameters used in adults when using the laser cannot be the same for the age range described in this study.

P-047
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Category: Original research: Clinical
Title: PHOTODYNAMIC TREATMENT OF ACTINIC CHEILITIS

Aim: To evaluate the effectiveness of PDT mediated by red light and methylene blue (MB) in ACTINIC CHEILITIS (AC)

Material and methods: Nineteen participants were selected after the histopathological confirmation of actinic cheilitis. They attended five visits on alternate days, respecting a 48-hour interval between sessions, except on weekends, over a period of 10 days. The intervention was performed using a laser mediated by a local anesthetic (LA) in a 1% solution, applied topically. After a 10-minute period, irradiation of the entire surface of the mucosa was conducted, with a spacing of 1 cm between the three application points, using a diode laser (MMOptics, model Laser Duo), which was validated and authorized by ANVISA (ANVISA/MS Registration No. 80051420022) for medicinal use. The wavelength used was 660 nm, with a fixed power of 100 mW, irradiance of approximately 3 W/cm², and an exposure time of 360 seconds for each session, delivering an energy of 1200 J/cm² per session, totaling 6 KJ/cm², with a beam area of 0.03 cm².

Results: In the fluorescence color analysis of the lips with dysplasia, there was a significant decrease after treatment with photodynamic therapy (PDT). Before treatment, the histogram displayed two peaks, around 160 and 200. However, after 30 days post-treatment, the distribution changed, and the histogram showed a single peak, indicating a more centralized data distribution. This change suggests that the treatment may have homogenized the values, reducing the variations that were more pronounced beforehand.

Conclusion: PDT can be a promising technique for the treatment of actinic cheilitis, as it has been able to reduce the color pattern of the affected mucosa.

P-048
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Category: Original research: Clinical
Title: IMAGING ANALYSIS REGARDING THE DISINFECTION EFFICACY OF DIFFERENT LASER WAVELENGHTS ON TITANIUM AND ZIRCONIA SURFACES: AN OCT AND SEM EVALUATION

Aim: Using SEM and OCT evaluations, this study examined the effects of laser irradiation on these common dental materials to determine how laser radiation affects surface integrity and temperature variations.

Material and methods: The research used Grade IV Ti alloy discs (98.5 mm diameter/8 mm thickness) and Zr ZirCad Prime plates (98.5 mm diameter/16 mm thickness).