Aesthetic and Functional Rehabilitation of a **Malformed Lower Lip due to Angioma**

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CJM, female, Caucasian, 12 years old. The main concern was the aesthetical change in the right side of her lower lip which presented an increased size and reduced functionality (Fig 1). Lesion occurred when the patient had 7 months.



Fig.1

TREATMENT – 2 SESSIONS

1 – After the infiltration anaesthesia lidocaína 2% (Xilonibsa®, 1:80.000, Portugal), the tumor was approached by the internal face of the lip. The first session started by following the lesion edges (safety margin 1mm) with 2.0W power (Fig. 4), and 2.5 to 3.0W continuous mode, 400µm filer in contact with the tissue for the excision. The specimen was sent to histological analysis. Results confirmed the vascular lesion indicated by clinical diagnosis (Fig 5) The wound stayed open for healing by second intention. Control sessions were made in days 3, 11 and 21 (Fig. 6, 7 and 8)

lip with an area of 25x12mm (Fig.2).

featuring the low lesion blood flow (Fig 3).



Fig 4. Lesion edges



after

after

Fig 6. Clinical presentation 3 days Fig 7. Clinical presentation 11 days Fig 8. Clinical presentation 21



In the second session, the lesion remains excision was made according to the aforementioned parameters (Fig. 7);





Clinically, the deformation was vascular lesion compatible, having positive

diascopy. The extraction of tumor content revealed a small blood entrance

Fig.3



Postoperative care: application

of chlorhexidine 2% gel. Cream

between 21 days and 3 months.

Paracetamol (1g) in the first 48

hours following treatment.

DISCUSSION

50 (Avéne®, France)





Fig 11. Clinical presentation 3 days after



Fig 12. Clinical presentation 3 months after

Fig 9. Lesion edges

FPS

Fig 10. Lesion resection

Fig.13 Clinical presentation 6 months after - labial mucosa Fig 14. Internal face of labial mucosa

The vascular lesion diagnosis can be made by its clinical aspect, through a diascopy maneuver and punction which, if arterial, causes pression in the syringe plunger making it rise (1,3). Diode LASER (980nm) was chosen for this treatment due to its haemoglobin high affinity, its cut and clotting abilities and its easy handling (3,4,5). The vascular malformation diagnosis was based on the patient history and clinical observation since the tumor didn't regress and it is trauma associated. Histologically, it was observed a high increase in the number of small blood vessels, coated by a single layer of endothelial cells and separated by fibrous septa (6).

CONCLUSION

Resection of vascular lesions with diode laser promotes a reduced bleeding during surgery, a reduced operating time and a postoperative with minimal discomfort and pain. All wounds were completely re-epithelizated in 21 to 30 days.

References-1. Neville BW et al. Patologia Oral & Maxilofacial. 2a. Ed. Rio de Janeiro: Guanabara Koogan 2004; Brasil, 798p. 2. Enjoras O, Wassef M, Chapot R. Introduction: ISSVA classification. Cambridge University Press. [Online] [Cited : 2009 16-06.] 3. Taylor DL, Schafer SA, Nordquist R, Payton ME, Dickey DT, Bartels KE. Comparison of a high power diode laser with the Nd:YAG laser using in situ wound strength analysis of healing cutaneous incisions. Lasers Surg . Med. 1997, jan; EUA, 21(3):248-54. 4. Genovese WJ, Santos MT, Faloppa F, Merli LA. The Use of Surgical Diode Laser in Oral Hemangioma: A Case Report. Photomed Laser Surg. 2010, fev; 28(1):147-51. 5. Akbulut N, Kursun ES, Tumer MK, Kamburoglu K, Gulsen U. Is The 810NM Diode Laser the best choice in oral soft tissue therapy?Eur J Dent. 2013; 7:207-11. 6. Katchburian E & Arana V. Histologia e embriologia oral. 2a Ed. Rio de Janeiro: Guanabara Koogan. 1999; Brasil, cap 4, p 81-104.