

Waterlase[®]
GUM DEPIGMENTATION PROTOCOL GUIDE

Waterlase® Gingival Depigmentation is a Patient Pleasing, Value-added Revenue Source

DARK GINGIVAL PIGMENTATION OCCURS NATURALLY

Pigmentation of the keratinized gingiva is a natural, genetic occurrence. Gingival pigmentation is prevalent in the Mediterranean, African, Asian populations and other people of color. The degree of pigmentation can range anywhere from a generalized dark brown or black gingiva to a spotty light brown or tan color.

While normal and natural, there are some patients that are not pleased with this pigmentation and would prefer to have a more 'pink' gingival tone. A spotty pigmentation can give an appearance that there is 'something' on the gums. An extremely dark gingival tone that is a marked contrast to a lighter skin tone, can be esthetically displeasing to some patients.

Dentists who perform gingival depigmentation or sometimes referred as "Gingival Bleaching" suggest that their patients who have undergone the procedure are one of their best sources of "Word of Mouth" marketing and generating referrals as a value-added revenue resource.

However, caution should be exercised in attempting media marketing. The messaging could be interpreted as saying the ideal gingival color should be pink and that pigmentation is not ideal or desired socially. This can be a sensitive subject.

CASE ACCEPTANCE

The patient who is interested in gingival depigmentation must be well informed and prepared. It is highly recommended that you start off doing a 'test' area so that the patient can see how the tissues will look after the treatment. The buccal of the maxillary second molar is an excellent 'test' area. It is easier to manage and a great visual for the patient.

For patients with generalized pigmentation, they should know that the total arch requires treatment. One cannot stop at the cuspid/bicuspid areas, as the contrast will emphasize the pigmentation in the posterior even more. For those patients with "spotted" pigmentation, you can manage the spots individually BUT that patient needs to know that the "pink" spotted areas may not blend in with the adjacent tissues. There may be a need to re-treat the patient with an entire quadrant treatment.

CASE SELECTION

When evaluating if a patient is a candidate for gingival depigmentation, the following etiology should be considered:

- ✦ Melanoma and/or Kaposi's Sarcoma
- ✦ Vascular abnormality
- ✦ Amalgam tattoo
- ✦ Heavy metal poisoning
- ✦ Hormonal imbalance (Addison's disease, Albright's syndrome, Acromegaly, Lelson's syndrome, etc.)
- ✦ Drug related pigmentation
- ✦ Smoking



Courtesy of Dr. Junghyun Park, Seoul, Korea

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GINGIVAL DEPIGMENTATION PROCEDURE

With **hereditary pigmentation**, melanocytes reside in the basement membrane and pigmentation is a suprabasilar condition. In order to remove the pigmentation, remove the layer of epithelial tissue, the basement membrane, and a portion of the connective tissue. It is critical to **stay away from the periosteum and bone**. As the layer of tissue is removed, the pigmentation will disappear. A technique that will allow you to remove this layer and not create significant bleeding is imperative to producing an ideal outcome.

1. Adequate local anesthesia is required as with a standard laser gingioplasty.
2. The following tips can be used with the accompanying settings:

Tips: MZ5, MC3, MZ6, MGG6

Settings: 1.5 Watts, 30 HZ, 50% air and 40% water

3. Pick one quadrant to treat first. Time needs to be scheduled to complete at least one entire arch OR the entire mouth.
4. Take your respective tip and start at the midline.
5. Aim the tip distally at a 30 degree angle between the tip and the gingival tissue, 1 mm from the tissue (Fig.2). Begin at the free gingival margin. Do not depigment the marginal tissue, so as not to alter the papillae.
6. Using a smooth, slow, vertical up and down motion, begin "peeling" away the tissues. After you remove the first 2-3 mm, stop, dry off the tissues with a dry gauze and evaluate the depth and color of the tissues.
 - a. If the pigmentation is removed, you are at the correct depth and position and can continue to other areas (Fig. 3).
 - b. If the pigmentation is still present, either continue with the same angulation and motion—then go back and retreat the areas until the pigmentation is removed or attempt to angle deeper as you progress to complete the quadrant (Fig. 4).
 - c. If you see any bone exposure, you are too deep or your gingival tissues are extremely thin and care needs to be taken NOT to remove as much tissue (Fig. 5).



Figure 1

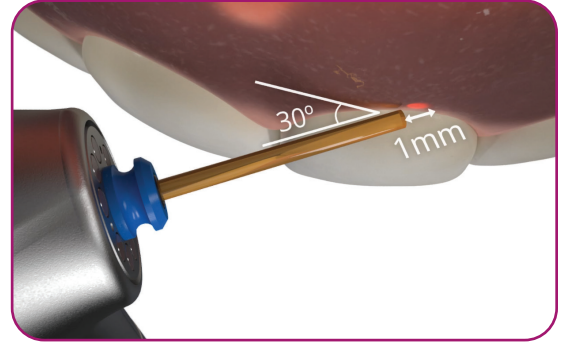


Figure 2

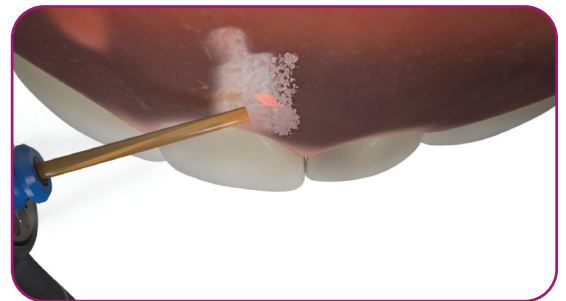


Figure 3



Figure 4

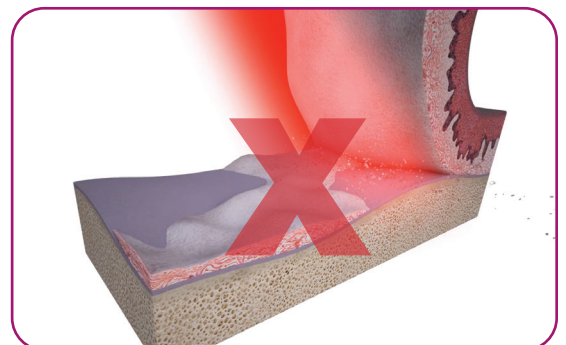


Figure 5

Continued on next page.

7. Repeat the removal and drying process multiple times while treating the quadrant (Fig. 6-7).
8. Once the quadrant has been completed, begin the other quadrant on the same arch.

POST-OPERATIVE CARE

1. Utilize a post-operative rinse (DO NOT use chlorohexidine due to its cytotoxic properties).
2. Consider very gentle brushing with a soft toothbrush starting from the gingival margin and moving coronal.
3. Care needs to be taken not to do any subgingival cleaning in the treatment area for the first week. Gentle subgingival care can be done for the second week and normal oral hygiene is recommended after the third week (unless there are complications with the healing).
4. Once the periodontal tissues have completely healed (usually around 6 weeks), it is acceptable to proceed with restorative care if indicated (Fig. 9)

CODING SUGGESTIONS

While Gingival Depigmentation is an excellent value added revenue procedure to a practice, it is considered an esthetic procedure by many third party payers. The procedure can be coded under either gingivoplasty or gingivectomy.

D4210	gingivectomy or gingivoplasty - four or more contiguous teeth or tooth bounded spaces per quadrant
D4211	gingivectomy or gingivoplasty - one to three contiguous teeth or tooth bounded spaces per quadrant

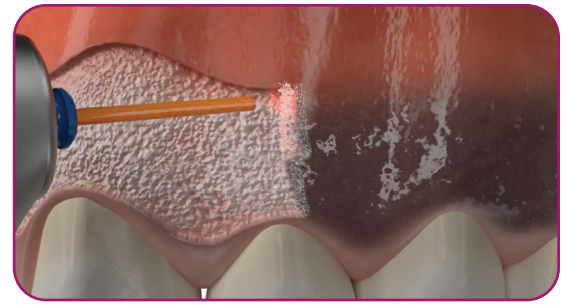


Figure 6



Figure 7



Figure 8 - Post Operative Healing



Figure 9 - Fully Healed

Watch the procedural animation at biolase.com/GumDepigVideo

