

LumaCool™ Whitening System Procedure Guide

(Please read entire guide before performing the procedure for the first time)

A Breakthrough in Tooth Whitening Technology

The LumaCool™ Whitening System is the fastest, easiest way to a whiter, brighter smile. And best of all, dentists using LumaCool maintain control over both the procedure and the revenues it produces. LumaCool is a highly profitable addition to the operatory and one that is capable of producing considerable revenues.

The LumaCool procedure is simple, but as with many things, a little time invested in understanding the process will help ensure optimal results. Once the dentist is familiar with the LumaCool Whitening System, he or she can vary the procedure according to each patient's needs within the context of an overall treatment plan.

Preparation

Patient Selection

The dentist should meet with patients in advance to determine whether they are good candidates for the bleaching procedure. All patients should have a thorough exam and complete x-rays prior to having a whitening treatment. Any gross decay, abscessed teeth, or periodontal disease should be treated before a bleaching procedure is considered. Only natural teeth will be whitened, so prominent fillings or crowns may need replacement after the whitening procedure. Stains caused by tetracycline or excessive fluoride are very difficult to remove. Grey/brown stains are harder to remove than yellow/orange stains. Patients with tooth sensitivity problems should be treated prior to bleaching. If a patient continues to report increased sensitivity, the teeth should not be bleached. Root surfaces sensitive to air should not be bleached. Patients with unrealistic expectations are not good candidates.

Good Candidates

Patients with healthy teeth and gums
Patients with treatable dental conditions
Patients who would like a whiter, brighter smile
Patients in good health with good oral hygiene
Patients with a small to moderate amount of yellow/orange staining

Marginal Candidates

Elderly patients (teeth of older patients are generally much harder to whiten than those of younger patients)
Patients with tooth sensitivity not improved with treatment
Patients with 1st or 2nd degree tetracycline or light fluoride staining
Patients with large pulps
Patients with grey/brown stains

Poor Candidates

Patients with 3rd degree tetracycline staining or heavy fluoride staining
Patients with unrealistic expectations—tooth whitening is not as perfect as veneers
Patients with known sensitivities to peroxides
Patients with extensive periodontal disease, exposed roots, severe loss of enamel, or cracked teeth
Patients with extensive restorations or extremely dark teeth, especially those with severe bonding

Patient Interview

In order to avoid disappointment, it is important for patients to have realistic expectations. Results can vary, depending upon the age of the patient, the type of staining, and the pre-op shade of the teeth. Therefore, it is unwise to make promises about the number of shade changes the patient can expect. Instead, the patient should be told that the dentist would do everything possible to give the patient a whiter, brighter smile. The LumaCool Whitening procedure should be viewed as part of an overall treatment plan. If teeth are deeply stained, discuss with the patient the possibility of performing a short etch cycle prior to bleaching. Some patients may require additional visits or at-home supplementary treatments to achieve the desired shade. Patients should also be told that composites and crowns would not lighten. Most will welcome replacing darker restorations to match their whiter, brighter smile, but they should be informed that this might be necessary. Patients should also be informed that tingling or a small amount of sensitivity during treatment is normal but that they should tell the dentist immediately if they feel burning or severe tooth sensitivity. LumaLite, Inc. offers a Patient Consent Form for the dentist's use in informing patients about the procedure; however some dentists may prefer to develop a form of their own. In any case, it is advisable that patients be fully informed and should indicate that they understand by signing a consent form.

Helpful Tips

1. Some patients may enjoy the use of music, TV, or a video during the procedure.
2. If any bleach solution makes contact with tissue, rinse and apply either vitamin E or bicarbonate of soda (baking soda) and water directly to the area with a wet cotton tip applicator. This will help neutralize any reaction.
3. Some patients may experience increased tooth sensitivity after treatment. This occurs more often with patients who have excessive wear or loss of enamel on the tooth surface. The condition usually resolves without treatment in 1-2 days. The use of a fluoride gel at home may help alleviate any discomfort. In some cases, a mild analgesic may be helpful.
4. If at any time during the procedure the patient reports moderate to severe tooth sensitivity, the cause is usually a cracked tooth, leaking restoration or other undetected condition. In these cases, the procedure should be stopped immediately, bleaching solution removed, and a fluoride treatment started. Schedule the patient for a dental appointment.
5. Always have an adequate supply of LumaWhite bleach, LumaBlock gingival protection, and cheek retractors on hand.
6. Rearrange the shade guide by value and not hue, for the purpose of showing patients results.
7. Avoid placing the bleach paste in contact with the gingiva or directly on root surfaces if the patient reports existing tooth sensitivity. If air on the root surfaces produces sensitivity, they should NOT be bleached.
8. Follow the instructions exactly. Dentists with experience in tooth whitening may be tempted to skip steps or bypass reading the instructions. This may result in unpleasant side effects or disappointing results for the patients.
9. If the bleach is not prepared according to the directions, results may be unsatisfactory. More is not better, and less is not as good. Never mix the bleaching material until it is time to be applied to the tooth surface **and always use freshly mixed material for each application.**
10. Some users place thin cotton rolls on either side of the frenum and then take a bead of LumaBlock and run it along the cotton roll, curing it into place. This gives the cotton roll a ridge to rest on and the cotton roll will not come down onto the bleach (push up or down on the cotton roll, depending upon where it is being placed and let it come to rest before putting the bead of LumaBlock in place). This way the cotton rolls stay in place and when the dam is removed, the cotton roll and dam comes off in one piece.
11. To reduce blanching, outline the teeth with the dam first and then fill in all of the pink spots, insuring that all areas are covered.
12. For optimal results, the in-office bleaching may be repeated (in two weeks) or maintained with take-home trays.
13. For deeply stained teeth (A 3.5 or above), a short etch cycle (10%-40% phosphoric acid) on the dark areas, after pumice treatment and prior to the protective dam placement may be helpful. Etched teeth may be more sensitive

- and rough, but etching will provide additional penetration of the bleach and give a better result. After etching, thoroughly rinse and dry teeth.
14. Wait two weeks before matching porcelain or composite restorations to whitened teeth. Previous color-matched restorations may need to be changed to match lightened teeth.
 15. Education of the patient is the key to achieving a good result. Expectations should be realistic, and patients should be cautioned about the susceptibility of bleached teeth to staining during the first 48 hours after treatment. They should be told to avoid tobacco and anything that would stain a white tablecloth.

Trouble-Shooting Guide

Problem

Possible Cause/Solution

No visible
Shade change

- Bleach may not have been mixed correctly or may have deteriorated. Prepare paste immediately before using and mix thoroughly
- Teeth may not have been prepared properly. Teeth must be cleaned and pumiced for the paste to properly penetrate the enamel. Materials containing fluoride or glycerin will interfere with absorption.
- Staining may have resulted from tetracycline or excessive fluoride. These kinds of stains are very difficult to remove as they are within the tooth rather than on its surface. It is not always possible to know which types of stains are involved through a visual inspection.
- Bleach coverage may have been inadequate. The bleach solution must be applied evenly, to a depth of 2mm.
- The patient may need additional applications. Up to a total of 4 cycles of up to 10 minutes each may be used per session on an adult patient. With LumaCool, the dentist is in control and can vary the procedure according to each patient's needs.
- Pre-op and post-op shade measurements may not have been accurate. Because of the subtleties in shade differences, it is important to take a careful shade measurement before and after the procedure. Without a shade guide, it can be difficult to discern even a 5-shade change.
- Occasionally, for unknown reasons, a patient's teeth do not respond well to the bleaching procedure. While one treatment is effective for most patients, some people may require more than one session to obtain optimal results

Tooth sensitivity

- The bleach may have been applied to exposed sensitive root surfaces. (Many patients welcome the treatment of yellow root surfaces and report that the discomfort is easily tolerable.)
- There may be gross decay, cracks, periodontal disease, or abscesses present. All significant disease should be treated before any bleaching procedure.
- The patient may have large pulp chambers. This is often the case in young patients

- The patient's teeth may be naturally sensitive. This should be determined before the procedure. If the patient's teeth are cold sensitive, they will likely be more so after the treatment.
- The bleach may have been left on the teeth for more than the recommended time, or more than three applications of the bleach were performed in one session.
- The bleach may not have been mixed properly. If the levels of hydrogen peroxide are too high, teeth may become sensitive

Tissue blanching

- A small amount of isolated tissue blanching is normal. This is temporary and should resolve within hours. To ease the blanching more quickly, use gauze with cold water, aloe vera, or liquid Vitamin E.
- The bleach may have been placed directly on the gingival tissues
- The paste may not have been mixed properly. If the levels of hydrogen peroxide are too high, blanching may occur.
- The patient may have existing gingivitis, periodontal disease, or irritated tissue. Such tissue tends to blanch quickly.

Patient complains of burning

- The patient may have severe periodontitis or gingivitis
- The patient may have untreated decay or abscesses
- The patient may have exposed root surfaces or very large pulp chambers
- The bleach may not have been mixed properly
- The patient may be particularly sensitive to peroxides. If so, the patient may not be a good candidate for further whitening and treatment should be terminated immediately.

Patient complains of rough teeth

- On occasion, some teeth may experience mild etching during whitening procedures. This can be easily corrected by polishing with rubber wheels and diamond polishing

Patient complains of teeth reverting to yellow

- The rough enamel may not have been polished after treatment
- The patient may have forgotten how much whitening was achieved during treatment
- The teeth may have been re-stained through the use of coffee, tea, tobacco, wine, or other staining foods and beverages, particularly if used within 48 hours of treatment.