

INFORMATION ABOUT Broad Band Light (BBL™) / LASER TREATMENT OF PIGMENTED LESIONS

How do the pigmented lesion BBL / lasers work?

At the Strimling Institute of Cosmetic Laser Surgery, we use BBL or the Q-switched Nd:YAG Laser (however, we have other lasers that we may use) to treat pigmented lesions (dark colored skin spots and conditions). BBL / lasers produces a very short burst of intense but gentle laser light. This light has the proper wavelength ("color") to be absorbed by brown pigment in such lesions as age spots or sun spots, freckles, cafe-au-lait birthmarks, and other pigmented birthmarks or conditions. Absorption causes "photothermolysis", or heat damage, just to the brown spots or lesions but does not damage surrounding tissue. BBL / laser treatment leaves other tissue intact, with normal pigmentation, or skin color in most patients. BBL/lasers are safe for use in patients of all ages, from infants to elderly. Successful treatment leaves natural skin color, not a "white spot" where the brown mark used to be.

Are there other ways to treat my pigmented lesion?

In the past, bleaching creams, Retin-A, fruit acid preparations (alpha-glycolics) and other agents or combinations of the above have been attempted, often with limited success, albeit usually minimal risks. Chemical peeling can sometimes be helpful, but is less predictable as to results and often may require several or more treatments. Cryosurgery is especially toxic to pigment containing cells. Although BBL/laser surgery is effective in most cases, no guarantees can be made that a specific patient will benefit from treatment. Many conditions for which BBL or lasers are useful need a series of treatments to reach the desired or optimal improvement. Some conditions lighten, but do not disappear, and require a second or third treatment for satisfactory results. Other pigmented lesions may not respond at all to this treatment.

Are there any reasons why I may not be a candidate for pigmented lesion BBL / laser therapy?

BBL / laser treatment may be less effective in darkly pigmented or suntanned skin.

What should I expect from this BBL / laser treatment? Expect some redness or superficial crusting of treated spots that lasts days to weeks.

BBL/laser therapy of pigmented lesions may consist of several sessions; each given usually every 6-8 weeks. The type of lesion you have will determine the number of treatments you need. For example, "liver spots" (also called "age spots") usually need 1 or 2 treatments, while cafe-au-lait birthmarks are less predictable and may require 1 to 2 or more treatments. **IMPORTANT:** There is considerable variation in how fast treated areas fade. Some may fade quickly, in 2 to 4 weeks, while others—even if they were treated the same day—may take twice as long. We have to wait a full 6-8 weeks after treatment to assess the full extent of fading. Make-up may be applied immediately after, if so desired. You may return to work the same day.

Are there any potential adverse effects? Any treatment, including BBL / laser therapy has the potential for adverse effects.

The following may happen after Pigmented Lesion (Removal) BBL / Laser treatment:

The treated area(s) may temporarily hyperpigment (turn darker). Though unpredictable, this tends to happen more often in darker skin. When hyperpigmentation happens on the face, normal skin color usually returns within 6 months. If hyperpigmentation occurs on the arms or legs, the return of normal skin color may take longer, up to about 1 year.

Scarring is a risk with any procedure, but with the pigmented lesion BBL or laser we use, this risk is very low (under 1 %).

Will the treatment hurt? The BBL/laser causes mild discomfort. Patients describe the feeling of a laser pulse as "being snapped by a rubber band", or like "the slight sting of a mosquito bite." Most patients tolerate BBL/laser treatment with no need for anesthesia. However, if you need some, the doctor will discuss the right kind to use (for example an injection of "local", or applying a cream approximately an hour before treatment).

How long will the BBL/laser treatment last? The time your treatment will take depends on many factors. Most sessions last less than 15-20 minutes.

What safety measures are needed during BBL / laser treatment?

The BBL / laser produces a very bright beam of light. Everyone in the treatment room must wear protective eyewear while the BBL / laser is in use.

If your lesion is not on your face, you may be able to watch the procedure if you wish. If it is on your face, we may place a moistened gauze over your eyes to protect them, or you may wear protective goggles which resemble the "sunnies" used in tanning booths. If there is hair near the treatment area, we recommend that you shave this area on the morning of the procedure. If this is not possible, we may moisten it with water or damp sponges to prevent heat build-up. Even if the hair is singed by the BBL / laser, it will grow back normally.

What will I have to do to take care of the treated area?

We provide each patient we treat with type-written aftercare instructions, which clearly describe appropriate care for the period after treatment. We encourage each patient to read these before leaving our office, and to let us know if there are any questions.

Will I be able to swim in chlorinated water? Yes, once any crusts that may form have fallen off (usually about 5-10 days).

However, showering is permitted the next day following treatment.

Will I have to stay out of the sun? No. However, you should use a sunscreen (SPF 30 or >) to protect the treated area if you will be outdoors.

What should I do if I still have questions? Ask us! Because we do not want you to consider BBL/laser treatment until you are completely comfortable, we encourage you to bring any questions or concerns to our attention. We will do our best to answer them.

INSTRUCTIONS FOR SKIN CARE AFTER Broad Band Light (BBL™) / PIGMENTED LESION LASER TREATMENT

You have had BBL/laser treatment of your pigmented lesions. They are now discolored, and a crust may form, lasting several days. Please read the following carefully. This information will let you know what to expect, and how to care for the treated area.

WHAT TO EXPECT

- ◆ The treated area may swell somewhat. This is caused by the BBL/laser energy, and represents inflammation, and not infection. It is normal and expected part of healing process.
- ◆ While the BBL/laser usually leaves the overlying skin intact, avoid manipulating the treated area for the first week after treatment. [A crust (or scab) may form and is not abnormal nor unexpected. This represents healing and does not necessarily mean the area will scar.] No dressing is usually needed. However, if the treated area scales or scabs up, keep the healing area moist with an antibiotic ointment (see below).
- ◆ The purpura (bruising or red-purple color) you may see in some treated areas will last 7-10 days on average. When it goes away, you will still be able to see the treated pigmented spots. The body gradually continues the fading process for several weeks, so that final results may not be seen for up to 4-8 weeks after treatment.

CARE OF THE TREATED AREA(S)

- ◆ If the treated area scales or scabs up, apply a thin coat of antibiotic ointment (i.e. Bacitracin or Polysporin) to the treated area once or twice daily for 7 days, or until the surface looks healed.
- ◆ Do not rub, scratch, or pick the area(s).
- ◆ Makeup is permitted, but be very gentle when applying or removing it.
- ◆ You may get the treated area wet, but be very gentle when drying it. Pat dry after showering. Swimming is generally permitted after 2-3 days or once all crusts (if any) have fallen off (usually, 5-10 days).
- ◆ Minimize sun exposure, as best as possible, for at least 1 month before and after treatment. Wear protective clothing (hat, etc.) and a high SPF (at least SPF 30) sunscreen to protect the treated area from direct sun exposure.
- ◆ You may help relieve any swelling by applying an ice pack wrapped in a soft cloth. Leave this on the treated area for 5-10 minutes per each hour for several or more hours.

PRECAUTIONS

- ◆ Do not use aspirin, aspirin containing medications or alcohol for at least 1 week before and for the first 2 days after treatment. You may take Tylenol or another pain reliever which contains no aspirin or ibuprofen, if needed.
- ◆ If the treated area becomes increasingly tender, red, swollen and/or purulent, contact our office immediately as this may represent an infection that may require treatment.

IF YOU HAVE ANY QUESTIONS OR CONCERNS, PLEASE CONTACT US.

Broad Band Light (BBL™) / PIGMENTED LESION (Removal) LASER INFORMED CONSENT FORM

The BBL/Pigmented Lesion Laser we use produces an intense, but gentle burst of light. This light has the proper wavelength ("color") to be absorbed by brown pigment in age spots / sun spots, freckles, cafe-au-lait birthmarks, and other pigmented birthmarks or conditions. Absorption causes "photothermolysis", or heat damage, just to the brown spots / lesions but does not damage surrounding tissue. Generally, BBL/laser therapy leaves normal colored skin intact. Our lasers are safe for use in patients of all ages, from infants to elderly. Successful treatment leaves natural skin color, not a "white spot" where the brown mark used to be.

Although BBL/laser surgery is effective in most cases, no guarantees can be made that a specific patient will benefit from treatment. Many conditions for which lasers are useful need a series of treatments to reach desired or optimal improvement. Some conditions lighten, but don't disappear, and require a second or third treatment for satisfactory results. Other lesions may not respond at all to this treatment.

WHAT ARE THE POSSIBLE SIDE EFFECTS / COMPLICATIONS OF LASER SURGERY? The most common side effects / complications are:

1. Pain / Tenderness - The BBL/laser causes mild discomfort. Patients describe the feeling of a laser pulse as "being snapped by a rubber band". Most patients tolerate BBL/laser treatment without anesthesia. However, if you need some, the doctor will discuss the right kind to use (for example an injection of "local", or applying a cream approximately an hour before treatment).
2. Crusting of the Healing Wound - Rare; but if a crust forms, this does not mean infection. Using Q-tips, gauze or fingers, cleanse gently twice daily with a mild / soap-less cleanser (e.g. Aquanil or Cetaphil) diluted with water, followed by application of an antibiotic ointment like Bacitracin or Polysporin to minimize crusts and hasten healing. Crusts usually heal in 5-10 days without long-term adverse effects.
3. Skin Pigment (Color) Changes - IMPORTANT: There is a lot of variation in how fast treated areas fade. Some may fade quickly in 3-4 weeks, while others--even if they were treated the same day--may take twice as long. Some may even darken a little for a while. We usually recommend waiting 6-8 weeks after treatment to assess the full extent of fading.

Uncommonly, treated areas may heal with increased pigmentation (hyperpigmentation, i.e. skin color darkening). This occurs more often in darker skin type individuals. We advise avoiding direct, unprotected (i.e. without using a full strength (SPF 30 or >) sunblock) sun exposure of the treated site(s). Swimming in chlorinated water is permitted once any scabs have fallen off (5-10 days). We may advise first doing test spots on hyperpigmentation susceptible patients or body regions, such as legs. Even with precautions, however, some patients develop hyperpigmentation. When this happens, the skin usually returns to normal color in 3-6 months; rarely, are pigment (color) changes permanent.

A few patients may notice instead a decrease in skin color (hypopigmentation), usually after repeated treatments to the same area and more commonly again in darker skin types than in lighter complexions.

These individuals usually also regain their color in 3-6 months, but pigment changes may rarely be permanent.

Of particular note, however, the BBL/pigmented lesion laser(s) generally offer the best chance of removing indicated hyperpigmented skin lesions / conditions without adverse effects and with minimized risks.

4. Bruising - Rare, slight, which generally lasts 5-10 days before going away, (if this happens at all).
5. Swelling - none to minimal; rarely, significant; Use ice packs 5-10 minutes/hour for several hours as needed. This swelling is normal and does not mean infection or scarring. Any swelling usually lasts up to several hours, but may rarely last several days or more.
6. Skin Fragility - Do not rub or pick treated areas. However, makeup may be applied at once, if so desired. Apply and remove it gently.
7. Scarring - Because the BBL/laser light penetrates very little into the skin and is "specific for" (i.e. specifically absorbed by and damaging to) the pigment containing cells with minimal damage to surrounding skin, scarring is rare and less likely than other older removal techniques. However, the BBL/laser may also "unmask" or make more evident prior scarring from previous non-light treatment/s of the lesions; which if present may be less visible until BBL/laser clearing of the lesion/condition. To minimize any risk of scarring, we advise careful adherence to all postoperative instructions.
8. Eye Protection - BBL/laser energy can harm exposed eyes. We therefore provide safety eyewear to be worn while the BBL/laser is in use.
9. Persistence of Lesion - Some pigmented birthmarks may respond only partially, not at all, or may return after responding initially.

We cannot guarantee results with this therapy.

By signing below, I acknowledge that I have read the following: "Information about BBL/Laser Treatment of Pigmented Lesions", "Aftercare Instructions for BBL/Pigmented Lesion Laser Treatment", and this "BBL/Pigmented Lesion Removal Laser Consent Form" and that I feel I have been adequately informed of the risks of laser surgery as well as of alternate methods of treatment.

I hereby consent to laser surgery, performed by Dr. Strimling and/or his associate(s).

I consent to the taking of photographs before, during and after the procedure. These photographs will belong to the doctor and may be used for scientific purposes, including lecture presentations or publication in medical or scientific texts or periodicals.

They will not be used for advertising without my express written consent that they may be used for this purpose.

Patient's Signature

Patient's Representative (Parent or Guardian) / Relationship to Patient

Date

Witness

Date