

Photorejuvenation with Broad Band Light (BBL)

In many ways, the effect of BBL (broad band light) photo-rejuvenation is similar to a laser, except this method uses a range of light wavelengths instead of the single wavelength characteristic of lasers. That's because different skin structures, such as capillaries or pigment spots, absorb light energy at specific frequencies or wavelengths. Photo-rejuvenation using the infrared range can also be used to give a more general heating of the collagen layer, which produces a light contraction or tightening of the skin around lax areas such as the face, neck, arms and abdomen.

What is the difference between Intense Pulsed Light (IPL)/ BBL and Lasers?

Lasers utilise a single wavelength to deliver the energy to skin targets. IPL or BBL uses a spectrum of wavelengths. Lasers have a reputation of precision and power and are established modalities in cosmetic dermatology. Early IPL/ BBL were dogged by technical and procedural issues that limited its effectiveness. Later generation IPL/ BBL are at least as good if not better than their Laser counterparts in certain conditions. Certain very basic IPL machines often used in non-medical settings may be less effective and have a higher side effect profile. Not surprisingly, BBL and Lasers share a similar side effect profile.

What can photo-rejuvenation do for me?

Reduce Blood vessels & facial redness

- Reduces and eliminates broken capillaries
- Facial redness may be the result of thousands of fine broken capillaries that when treated will lead to reduction in the appearance of facial redness
- Leads to less facial flushing and burning

Eliminate Pigment/ brown spots

- Freckles and age blemishes
- Face, neck, v-chest and hands commonly affected areas

What does the procedure involve?

A minimum of 3 treatments are necessary for best results, usually spaced 2 to 4 weeks apart. No anaesthetic is required as there is a cooling plate that protects the skin and also reduces the treatment discomfort. However, if required, topical anaesthetic cream may be applied 40 minutes before the procedure.

Protective eyewear is required during the procedure as the reflected light can be very bright. A cool gel is used on the skin to facilitate skin contact of the handpiece. When the device fires, there is a bright flash followed by a brief stinging pain similar to a rubber band flick. This is followed by a burning sensation that lasts for a few hours.

What happens after treatment and how long will the results last?

The treated area will be red and slightly sensitive for a few hours. Make-up may be applied if desired. There may be associated swelling (especially around the eyes and back of hands) and mild point scabbing that will settle within a week. Treated vessels may darken which is a good sign but is not necessary for the treatment to be effective. Most of the treated vessels will disappear although some may return after 24 hrs, indicating a need for further treatment. The treatment results are long lasting but new vessels may occur naturally, or as part of the underlying rosacea process, requiring top-up treatments later. There is the chance of having an outbreak of pimples following treatment as rosacea is an inflammatory process and the BBL treatment causing temporary inflammation.

Treated pigment will darken indicating that the treatment has worked. These pigmented spots will further darken in the next few days and gradually work their way up the skin surface and fade after 7 days. Sun avoidance is crucial to keep the pigmented lesions away. In Australia, the rate of pigment recurrence is higher because of the higher levels of UV exposure.

What are the unwanted side effects of photorejuvenation?

Side effects are uncommon with newer generation devices.

However, the following may occur:

- Burns to the skin leading to significant scabbing and blistering, it is important to return for review if this occurs.
- Alteration in pigment – darker or lighter.
- Darker skin individuals are those with recent tanning are at greater risk of developing both increase or decrease in pigment you must avoid sun exposure for at least 3 weeks prior to treatment.
- The alteration in pigment may either be temporary or rarely, permanent.
- Scarring and indentations – usually as a result of burns (extremely rare).

Is everyone suitable for photorejuvenation?

There are certain circumstances in which we may not treat:

- Pregnant or breast-feeding women.
- Children under age 18 (must have parental consent).
- Current significant skin disease / infections such as cold sores at the site of treatment.
- Current or past history of skin cancers on treated areas.
- History of keloid scarring (special precaution in high risk areas).
- History of light sensitivity including connective tissue disorders, lupus, porphyria.
- Patients on medication that causes sensitivity to light.
- Any emotional, mental or medical condition that may result in unrealistic expectations of the results of treatment.

BBL Post treatment skin care procedure

Sun exposure to the treated area should be avoided at least 3 weeks prior to treatment. A sunblock containing either zinc oxide or titanium dioxide should be applied to the area to be treated whenever exposed to the sun. Do not use self-tanning products for 3 weeks prior to treatment.

1. Swelling, redness and a slight sunburn sensation may be experienced and on occasion blistering
2. It is important that you prevent drying and crusting of the skin by using a gentle moisturiser or ointment. If crusting occurs it should be allowed to fall off naturally. Please do not pick. Vaseline applied to the crusting will help it resolve quickly.
3. Vaseline or an antibiotic ointment should be utilised if there is any blistering or break in the skin. Notify surgery if this occurs.
4. Please do not wax or pluck hairs during the course of the treatment.
5. Please contact our office if you are concerned about your treatment site or have any questions.
6. If the treated area is irritated you should not rub it with a towel or cloth but pat dry.
7. In the case that blisters develop do not apply makeup.
8. Continue to use a physical sunblock with zinc or titanium every day to maximise the results of your treatment.