

## **Pigment and Sun Spot Treatment**

Over time, the skin will develop zones of extra pigmentation particularly on the face, neck, and hands. These visible "sun spots" will affect the tone of the skin and the effects accumulate with age.

### What Treatment Options Are Available?

Laser and light treatments are available to treat the skin and address uneven pigmentation and spots. Lighter spots and large areas may be treated using the latest optical (IPL) and radiofrequency energy combination.

Darker or single spots may be treated with an ablative CO2 laser which provides a more targeted delivery.

Thicker moles may require surgical treatment for complete removal. Read more about cosmetic skin tag and mole removal.

# Who Are Good Candidates for Laser and Light Therapy?

Healthy men and women who are concerned about the effects of the sun on their skin, with stable pigmented or red areas. For best results, we recommend that the skin have no tanning in the previous month.

You will need a medical examination to rule out skin cancer, infection, eczema, dermatitis, skin inflammation, or hormone related changes to your skin. If necessary, biopsies may be required to establish the safety of the treatment plan.

Once you have met Dr. Lee and our experts, you will be presented with a customized treatment plan to address your pigmented areas.

### What Is IPL and How Does It Work?

Intense pulsed light, or IPL, systems produce a broad spectrum of light in a range of wavelengths. These wavelengths are filtered to target pigment and blood vessels. They are also customized to suit your skin type. IPL treats the damaged superficial layers of the skin, while delivering thermal energy (heat) to deeper tissues. The treatment is most commonly used to target uneven pigmentation of the:

- Face
- Neck
- Chest
- Arms and hands

At the Ottawa Institute of Plastic Surgery, we use a hybrid technology that combines light energy with radiofrequency energy to selectively heat the deeper dermal layer of the skin, stimulating collagen production. As the new collagen forms, the skin becomes thicker and tightens, which acts on fine lines and wrinkles.

# What Does an IPL Treatment Feel Like? How Long Does It Take?

After a mild skin cleansing, your face will be covered by a cool gel. Your eyes are protected with an eye cover. You will sense a bright flash of light and a mild stinging sensation. Most people describe the sensation to be similar to the "snap" of a rubber band. Soothing gauzes soaked in a gentle toner are applied to the area after the treatment. Generally a full facial treatment takes approximately 30-45 minutes to complete. Larger areas will take longer.

### How Does a CO2 Laser Work for Pigmented Lesions?

A CO2 laser is a type of laser which targets the water in the cells of your body. This is a precise and directed laser, where the beam is focused on each spot. The effect of the laser is a precise surface treatment that sands down each layer until the target pigmented cells are removed. To allow enhanced healing, the laser can be delivered in a "fractional" manner where columns of normal skin are preserved, which are needed to heal the area with minimal visible scarring. For best results, at least 2-3 sessions may be needed.

# What Does CO2 Laser Treatment Feel Like? How Long Does It Take?

The CO2 laser treatment is treated with a higher level of cleanliness as this is similar to a minor medical procedure. You will have your face cleansed and prepared with an antiseptic solution. Depending on the area, you may require a temporary local anesthetic to freeze the skin. Once the area is frozen, you do not feel any pain during the procedure. Each spot takes on average 15 minutes to treat. An ointment will be placed over top, and a small dressing placed if needed. The skin over the treated area is raw and takes approximately 5-7 days to heal over. You will need to avoid direct sunlight to the treated area for at least 1 month after the treatment.