

## Intense Pulse Light Therapy (IPL) Information Sheet

### **What is Meibomian Gland Dysfunction and/or Evaporative Dry Eye Syndrome?**

Meibomian Gland Dysfunction (MGD) is a common condition where the Meibomian glands, located in the eyelids, do not function properly. These glands secrete an oily substance that helps to lubricate the surface of the eye and prevent tears from evaporating too quickly. When the Meibomian glands become blocked or dysfunctional, the quality and quantity of the oil they produce may be insufficient. This can lead to a range of symptoms, including dryness, irritation, redness, itching, and a gritty sensation in the eyes.

Evaporative Dry Eye Syndrome is a type of dry eye condition where there is an imbalance in the tear film, resulting in excessive evaporation of tears. Normally, the tear film consists of three layers: an outer oily layer produced by the Meibomian glands, a middle aqueous layer, and an inner mucous layer. When there is inadequate oil production from the Meibomian glands, the outer oily layer may be deficient, causing tears to evaporate too quickly and leaving the eyes dry and irritated.

Both Meibomian Gland Dysfunction and Evaporative Dry Eye Syndrome can result in similar symptoms and may overlap in some cases. Effective management typically involves addressing the underlying cause, such as using warm compresses, eyelid hygiene, artificial tears, or in more severe cases, treatments like Intense Pulse Light Therapy (IPL)

### **What is Intense Pulse Light Therapy (IPL) Treatment?**

The purpose of Intense Pulsed Light (IPL) therapy in the context of eye care is primarily to treat Meibomian Gland Dysfunction (MGD) and associated Evaporative Dry Eye Syndrome. IPL therapy involves the use of broad-spectrum light pulses to target and treat abnormal blood vessels and inflammation in the eyelids, which are often contributing factors to MGD.

Specifically, IPL therapy for MGD aims to:

- **Improve Meibomian Gland Function:** IPL therapy can help to reduce inflammation and blockages in the Meibomian glands, allowing them to produce and release the necessary oils to stabilize the tear film and prevent excessive tear evaporation.
- **Reduce Dry Eye Symptoms:** By addressing the underlying causes of MGD, such as inflammation and vascular abnormalities, IPL therapy can lead to a significant reduction in dry eye symptoms, including dryness, irritation, redness, and discomfort.
- **Promote Ocular Surface Health:** IPL therapy may also have additional benefits for overall ocular surface health by improving tear film stability and reducing the risk of complications associated with chronic dry eye, such as corneal damage or infection.
- **Minimize Dependence on Artificial Tears:** With successful treatment, patients may experience decreased reliance on artificial tears and other symptomatic treatments for dry eye, leading to improved comfort and quality of life.

IPL therapy is often recommended for patients with moderate to severe MGD who have not responded adequately to conventional treatments such as warm compresses, eyelid hygiene, and artificial tears.

### **Prognosis and possible risks:**

During this procedure, potential experiences and risks may include:

- Sensations varying from painless to feeling akin to a snap of an elastic band against the skin, contingent upon the individual's skin sensitivity and the specific condition being treated. Following IPL, the skin may feel tender, akin to a mild "sunburn" sensation, for which cooling or soothing creams can provide relief.
- Redness and mild swelling may persist for a few days post-treatment.
- Pigment changes, either lightening or darkening of the treated area, might occur.
- While rare, bruising or blistering could potentially happen. The likelihood of bruising may escalate if one is taking aspirin or other blood thinners.

### **How often do I need IPL Treatment?**

A complete IPL treatment consists of four sessions, spaced 2-4 weeks apart. In some cases, patients may need up to five sessions for the best results. There's no requirement for follow-ups between sessions. However, a maintenance session might be necessary 6-12 months after the final IPL treatment. We'll arrange a follow-up appointment six weeks after the last IPL session to assess the need for additional treatments

### **How can I prepare for my treatment?**

- Ensure you have completed the Skin Type Questionnaire.
- Refrain from direct sun exposure or artificial tanning for 3-4 weeks before and after treatment.
- Avoid cleaning the skin on the day of your treatment.
- Remove any residual makeup and cleanse the skin the night before your treatment.
- Discontinue the use of retinoid cream at least one week prior to your treatment.
- Eye shields will be utilized during the treatment for safety.
- After IPL treatment, the doctor will apply pressure to your lids to express meibum (oil) from the glands, which may cause some discomfort.
- Use sunscreen for at least one-month post-treatment, preferably with zinc oxide.
- Minimize sun exposure, particularly in the first 48 hours post-treatment, as tanning may increase melanin regeneration, leading to unwanted hyperpigmentation.
- Makeup can be applied after treatment but discontinue use if you notice any dryness or skin irregularities in the treated area.
- Potential adverse events include temporary pigmentary changes, flare-ups, irritation, itching, dryness, burns, prolonged swelling or redness, Herpes simplex virus outbreak, Post-Inflammatory Hyperpigmentation (PIH), and scarring. Please review and sign the informed consent thoroughly.
- Discuss any concerns with your doctor.