













Meibomian gland dysfunction &

Estimated Rosacea Preva In U.S. Adult Populatio

the skin

Meibomian Gland dysfunction & the skin • In 20% of cases, ocular signs precede skin rosacea - possibly suggesting that skin rosacea could already exist in a subclinical forms

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the Skin

Risk factors Female > Male

- fair skin, particularly if it has been damaged by the sun
- over age 30
- Smoke
- family history of rosacea
- Triggers

 Hot drinks and spicy foods Alcohol
 - Temperature extremes
 - Sunlight or wind
 - Emotions
 - Exercise
 - Cosmetics
 - Drugs that dilate blood vessels, including some blood pressure medications

Prevalence of OSD In **Surgical Patients**











































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- 1. The level of key inflammatory markers decreased after IPL treatment
- This observation occurred in both sides, but was more pronounced in the side treated with IPL
- Improvement in lower eyelid gland clear secretion was associated with a reduction in the level of IL-6

Note: IL-6 is a key cytokine with a central role in regulation inflammation (backup slides)

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Dell et al 2017 (design)

- Prospective, 2 sites (USA)
- 4 IPL treatments (Fluence: 17-20 J/cm²), 3 weeks apart
- Each IPL treatment was immediately followed by meibomian gland expression
- Final follow-up (FU3): 4 weeks after the last IPL treatment
- Outcome measures:
 - 1. Tear breakup time (TBUT)
 - 2. Symptoms (SPEED)
 - 3. Corneal Staining (CFS)
 - 4. Meibomian Gland Score (MGS)
 - 5. Tear Film Osmolarity (TFO)
- 6. Lipid layer thickness (LLT)



Dell et al 2017 (Conclusions)

- 1. Classical measures of dry eye similarly improved in pts treated with IPL
- 2. <u>On average</u>, IPL treatment decreased the severity of dry eye from moderate to mild
- 3. Lipid layer thickness was not affected by IPL

















Patient Selection

- · Get a fully-detailed medical history
- · Use of a medical questionnaire and informed consent form is advised
- Exclude any lesion with malignant potential
- For any suspicion on cancerous lesion, excision biopsy may be considered
- Patients with unrealistic expectations should be identified during the consultation and discouraged

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Skin Assessment

- Tanning of all forms (sun, tanning beds) is formally contra- indicated as melanin would be redistributed and migrate towards upper epidermis building a "lightblocker" to any treatment
- Also exclude self tanning lotions which give the skin a competing artificial colouration through a chemical reaction with the amino acids of the stratum corneum
- Tanned skins CANNOT be "defined" by selecting a darker skin type
- On areas with slower "de-tanning" passed the minimum solar eviction of 3-4 weeks, recommend gentle exfoliation of the area 1 week prior treatment

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Contraindications

- Treatment should not be attempted on patients with the following conditions in the treatment area:
 - Active infections
 - Dysplastic nevi
 - Significant concurrent skin conditions or any inflammatory skin conditions
 - Active cold sores, open lacerations or abrasions
 - Chronic or cutaneous viral, fungal, or bacterial diseases
 - Exposure to sun, remaining suntan or artificial tanning in the 3-4 weeks pre-op plan Tattoos
- Treatment should not be attempted on patients with a history of skin cancer or pre-cancerous lesions on the treatment area

Complications

- Erythema (redness) and edema (swelling) of the treated area can occur
- Irritation, itching, and/or a mild burning sensation or pain similar to sunburn may occur within 48 hours of treatment.
- Pigmentary changes such as hyper pigmentation and hypo pigmentation of the skin in the treated areas can occasionally occur.
- Other known complications of this procedure include blisters, redness, pinpoint pitted scars, bruising, superficial crusting, burns, pain, and infections. These side effects are usually temporary, lasting from five to ten days but can be permanent as well.

Who is a candidate for IPL treatment?

- Moderate to severe dry eye/ MGD/ Blepharitis
- Fitzpatrick Skin Type Scale
 types I-IV







































Optima IPL Procedure

- Fitzpatrick Skin Typing
- Review All Medications
 DC Macrolides, Accutane, Retin-A, CA Drugs
- Thoroughly clean skin of moisturizer, makeup, sunscreen
- Apply Coupling Gel
- Apply IPL Grade Eye Shield
- Set Energy/Duration/Delay
- Apply Double Pass (Ophthalmic Settings)
- Express +-
- Remove Coupling Gel
- Apply Moisturizer and Sunscreen
- Reappoint 3-4 weeks

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By the Numbers

- Optima M22 Intense Pulse Light
 - Cash Procedure
 - Packages 4 Treatments
 - 3-4 Weeks apart
 - \$1000 to \$1400 a Patient
 - Disposables (gel, shield, tongue depressor, tissue \$2)
 \$60,000 Investment Payback 43 to 60 patients (4.5 Months)
 - No Click Fee \$6000 replacement head after 100,000 or \$299,000 to \$412,000 Revenue
 - Training and Dialogue

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My Practice Experience

Thermal Pulsation (Lipiflow, Digital Heat, iLux, Tear Care)

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Most rapid payback of any major piece of therapeutic equipment

Discuss with any MGD patient with telangiectasia

Nearly 6 ½ Years of experience

Optima IPL

Package with BlephEx

4 Sessions of IPL 3 to 4 weeks apart

Cosmetic and therapeutic treatment