

Lunch Hour Treatment for Dry Eyes with new Advanced Technology

23 May 2018 | Interviews | By Dr Saurabh Mittal, Ophthalmologist

Dry eye disease is a common condition that causes ocular discomfort and reduces visual acuity. Dr Saurabh Mittal, Ophthalmologist, Thind Hospital, Jalandhar talks about M22 OPT technology and its benefits in treating a dry eye condition



The two categories of dry eye disease are evaporative dry eye and aqueous-deficient dry eye. Both conditions can involve pathology of the meibomian glands, lacrimal glands, lids, tear film, and surface cells. Evaporative dry eye accounts for 80% of dry eye cases. Meibomian gland dysfunction (MGD) is the leading cause of evaporative dry eye and contributes to aqueous-deficient dry eye. Meibomian glands are modified sebaceous glands located along the upper and lower eyelid margins. Twenty to Forty glands are located along each lid and secrete meibum, the lipid component of tears. MGD is defined by the International Workshop on Meibomian Gland Dysfunction as a chronic, diffuse abnormality of the meibomian glands, commonly characterized by terminal duct obstruction and/or qualitative/quantitative changes in the glandular secretion." Patients may experience symptoms of eye irritation and clinically observable ocular surface disease and inflammation due to alteration of the tear film. The goal of MGD therapy is to provide long-term improvement of symptoms for patients by improving the quality of meibum, increasing meibum flow, improving tear film stability, and decreasing inflammation. Commonly used therapies include preservative-free drops, omega-3 fatty acid supplementation, topical cyclosporine serum tears, topical azithromycin, oral doxycycline, moisture chambers, intraductal probing, lid margin exfoliation, automated thermal pulsation, warm compresses, and others. Despite the variety of treatment options available, patients often do not experience complete or long-term relief of symptoms.

The experience with IPL over the last 6 months period in 110 patients suggests that it is safe and effective treatment for MGD related dry eye even in Asian Indian population. It is found to be effective in 60-70% patients and shows improvement in symptom score and disease characteristics in 60 % of cases 2-3 weeks following the first treatment.

M22 OPT

Intense pulsed light (IPL) devices have long been used in the field of dermatology to treat acne rosacea, acne vulgaris, hyperpigmentation, essential telangiectasias, unwanted hair, and photodamaged skin. IPL is a high- intensity light source consisting of visible light in the wavelength range of 515 to 1200 nm. The light is both polychromatic and incoherent. Lumenis M22 with OPT™ is an excellent advanced IPL technology for treating eyelid inflammation. M22™ combines unique optimal

pulse technology (OPT™) to treat dry and itchy eyes. OPT™ is selectively absorbed in the haemoglobin of abnormal blood vessels, and destroys them by thrombosis. A major source of inflammation threatening the eyelids is then removed.

Most patients with dry eye undergoing M22 OPT receive this treatment as a last resort after trying several other therapies. They often have severe MGD and few to no expressible glands. It is postulated that oxyhemoglobin in blood vessels located on the surface of the skin absorbs light emitted from the flash Lamp. The absorption generates heat that coagulates the red blood cells, leading to thrombosis of the blood vessels. Given the proposed mechanism of IPL, patients with ocular rosacea and associated lid margin telangiectasias would be the best candidates for treatment. Treatments are spaced 4 to 6 weeks apart, and patients typically receive 1 to 4 treatments with no established limit on the number of treatments.

M22 OPT is the right choice for patients. It treats the root cause of the problem, provides immediate relief, safe and comfortable, fast 'lunch time' treatment and improves the skin appearance too.