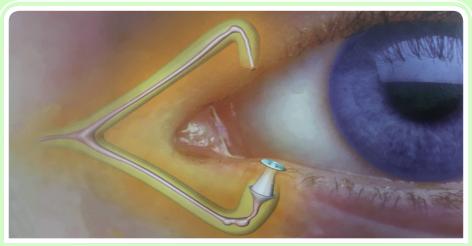
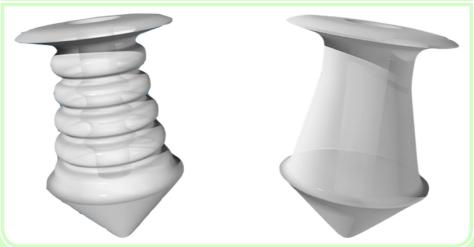
## **Lacrimal Occlusion**

Dry eye treatment

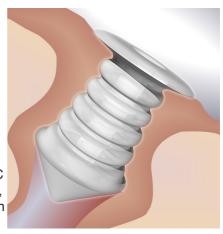




## **Matheson Optometrists**

**Specialist Therapeutic Optometrists** 

Dry Eye is caused by either a patient not secreting enough water into their tears, often a problem post menapause or associated with certain inflammatory conditions, or excess evaporation of the watery component of the tears often due blocked oily glands on the lid margin. Dry Eye management can take many forms from eye drops such as the TLC product MeiboTears, lid hygiene with products such as Theratears Sterilid, TLC Meiboclean and TLC sensitive Lid Wipes, Intense Pulsed Light Photo-biomodulation (IPL) and punctal occlusion either with punctal plugs or cautery



Punctal occlusion is performed when the tear volume is low and works by reducing drainage of the tears down into the nose and then to the throat. This can be achieved either by inserting a carefully measured medical grade silicone implant into the punctal opening of either the lower or sometimes the upper eyelid. It is also possible to cause the same effect by inserting an implant further down the drainage system, in which case its termed an intracanalicular implant, or by inducing surgical shrinkage of the punctal opening by thermal or radio-frequency cautery. Examples of these procedures are shown in our punctal occlusion video. Nowadays intra-canalicular plugs are fitted much less frequently than in the past.

There are a number of reasons why punctal plugs have become one of the most popular method of treating dry eye. They have a very high rate of success; and the optometrist can insert them easily and painlessly. More than 300,000 dry eye sufferers have been successfully treated, lacrimal occlusion. This treatment increases tear volume passively often without the need for eye drops. IPL or Intense Pulsed Light treatment also offers a big reduction in dry eye symptoms by enhancing the lipid layer and reducing inflammation by a process called Photo-Biomodulation. This is covered on our website and another information leaflet. There is also a YouTube video on both punctal occlusion and IPL among other eye-related presentations.

Punctal plugs are safe silicone medical grade implants which are easily and painlessly inserted usually into the larger, inferior openings of the tear drainage systen, near the nose, thereby keeping about 65% of the tears that would have previously drained down the throat in contact with the eye. They can be easily removed if no longer required. Punctal plugs often enable a patient who would otherwise have to give up wearing contact lenses, to keep doing so.

Prior to fitting, the puncta is made numb with an anaesthetic eye drop. The punctal opening size is assessed by inserting small stainless steel measuring guages. The correct size of plug is then inserted with a sterile insertion tool. The exposed top of the plug can be a bit dry for 2-3 days after insertion, but is fairly unnoticable after this period. Using extra dry eye drops for 2-3 days after treatment helps greatly.

Some people have a puncta that is too large or lax to hold a puntal implant - in these cases we often consider punctal cautery as an option. This procedure sounds worse than it really is. The punctal opening is strongly numbed with anaethetic beforehand and the thermal or radio-frequency tip is only



in contact with the lid tissue for a second or so. Cautery is a permanent form of occlusion in most cases and so can work out cheaper in the long run than having punctal plugs fitted as these may need replacing as the puntal opening enlarges as the tissues age. Plugs are usually effective for at least 2-3 years.



Dry eye patients should also consider the option of Intense pulsed light treatment, also known as IPL, which also increases tear volume, this time by reducing tear evaporation loss. IPL also reduces inflammation and restores the tear osmolarity (saltiness) which then further improves tear quality by improving the health of the mucous secreting conjunctival goblet cells.

Patients interested in having Amniotic Membranes or Punctal Implants fitted or IPL will need to have a specialist theraputic dry eye evaluation first to ensure that they are the most appropriate option and whether other treatments are also required. Please phone or email our practices for an appointment.

## **IPL Treatment**

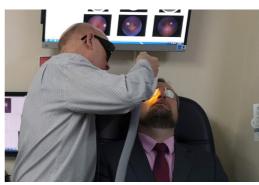
IPL Photo-Biomodulation is a new exciting drug-free, treatment option for patients with Evaporative Dry Eye, Blepharitis and Rosacea. We offer this procedure, using the advanced Lumenis M22 device. This delivers scientifically controlled pulses of intense red and infra-red light of only a few

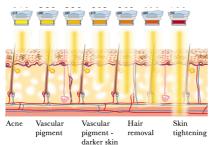
milliseconds duration which are applied to the eyelids and upper face.

Clear meibomian lipids after IPL treatment

IPL stimulates the tear glands, reduces inflammation and broken veins, helps eradicate mites and bacteria and improves the "flowability" of the tear lipids, all helping to improve the tear film and reduce dryness.

In the photo opposite you can see a patient having the IPL procedure performed. In most cases a series of 4-5 treatments is required, spaced 2-6 weeks apart.





Additional beneficial side effects of IPL treatment can be wrinkle reduction and facial hair removal by altering the wavelength of the light used during treatment, different structures withing the skin can be targeted



Why not visit the Dry Eye Forum
The place to talk about Dry Eye!
dryeyeforum.co.uk



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