Blepharitis

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(1) What is blepharitis?

Blepharitis is a relatively common condition typically occurring after the age of 30. The term refers to inflammation of the eyelid 'margin' - where the skin becomes continuous with the wet mucosal lining. It can affect the eyelash roots (anterior blepharitis) and the area immediately behind this (posterior blepharitis). In the latter, the fine Meibomian glands which lie within the eyelids may also be affected - this is referred to as meibomianitis.

(2) What causes blepharitis?

In most patients, the cause is unclear**.** In anterior blepharitis, excess bacterial activity is thought to play a role. Posterior blepharitis is probably not related to bacterial activity at all, and is more common among patients with generalised or facial skin conditions such as seborrhoeic dermatitis and rosacea.

(3) What are the features of blepharitis?

The following symptoms may occur, and typically affect, to varying degrees, all four eyelids:

(i) Redness and itching of the eyelid margins

(ii) Irritation and 'dry eyes'

This occurs because without adequate oil secretions on the tear film, the tears evaporate rapidly, this being worse outside in the wind or in an air-conditioned environment. Thus, one of the aims of treatment is the improvement of both the quality and quantity of the oily Meibomian gland secretions (see below).

(iii) Excess watering of the eyes

An irregular tear film (due to failure of Meibomian secretions) can lead to localised areas of dryness on the ocular surface as described above. This can stimulate excessive production the aqueous (watery) component of tears, with patients sometimes describing uncomfortable 'streaming' eyes.

Unfortunately, without the correct ratios between the mucus, aqueous and oily components of the tears, such excess watering does not adequately lubricate the ocular surface, and further cycles of excess watering can occur.

(iv) 'Cyst' formation within the eyelids

With thickening and collection of the oils within the Meibomian glands (this more likely in colder climates), a local inflammatory response may occur. Inaccurately termed 'cysts', these swellings are in fact localised inflammatory reactions to collection(s) of oil within the eyelid. Acutely, the 'cyst' is can become inflamed or even infected, and over a few weeks the inflammation either settles completely or leaves a residual lump within the eyelid (a chalazion).

(v) Eyelash loss and lid notching

These changes may occur in long-standing disease, but can also occur in other diseases, and an ocular opinion should be sought.

(4) Is blepharitis a life-long condition?

No. The disorder tends to wax and wane and in most patients does not tend to last – in its severe form – for more than a few months.

(5) What factors make blepharitis worse?

Blepharitis tends to be worse in cold windy weather, air-conditioned environments, prolonged computer usage, sleep deprivation, contact lens wear, and with general dehydration.

(6) **What investigations are required in blepharitis?**

Blepharitis is a clinical diagnosis, although in severe cases swabbing for bacterial cultures can be contributory, and if the diagnosis is in doubt, a biopsy may be required.

(7) How is blepharitis treated?

The management of blepharitis includes the following measures, which should be performed in this order:

(i) Long-term lid hygiene:

Daily application of hot compresses to the closed eyelids helps to loosen any crusting on the eyelids, in addition to warming (and therefore thinning) the Meibomian gland secretions within the eyelids. Several techniques are described: the easiest way is to soak a flannel under the hot tap (do not scald), wring it out, and place this over the closed eyelids for 15 – 30 seconds, and repeat several times both morning and evening.

(ii) Eyelid scrubs:

Place a small amount of cool boiled water into an egg-cup and add a drop of baby shampoo. Using a cotton bud wetted with this solution, gently massage the eyelids in a vertical direction – upwards on the lower lid, and downwards on the upper lid. This tends to express the (warmed) oily secretions from the eyelid glands. Then massage horizontally over the lashes themselves – this can be done with the eyes open or closed.

(iii) Antibiotic and steroid treatment:

When prescribed, application of topical antibiotic to the lid margins in the early stages (or with recurrence of more active disease) helps to bring the inflammation under control. A reducing course of weak topical steroid drops may also be prescribed, in addition to a course of oral antibiotic if there is associated facial skin disease.

(iv) Topical ocular lubricants

Ocular irritation can be relieved with the application of topical lubricants. There are various different formulations available over the counter, as well as more advanced lubricants available only on prescription. Some are more viscous than others, and several may need to be tried before finding the most effective preparation. The optimum lubricants are manufactured to reflect the behaviour and constituents of natural tears.

(8) What are the risks to the eyelids and the eye from blepharitis?

(i) Lid cysts

As mentioned above, lid cysts may become acutely inflamed or infected, and rarely require treatment with oral or even intravenous antibiotics. Chronic lid 'cysts' (chalazia), may require incision and curettage with or without debulking of thickened tissue (see advice leaflet on lid 'cysts').

(ii) Lid scarring and trichiasis (aberrent, inwardly turning eye lashes)

Chronic eyelid inflammation can lead to inturning of the eyelid (entropion – see advice leaflet), misdirected eyelashes, localised loss of eyelashes, and notching of the eyelid margin.

(iii) Corneal scarring

Any entropion, in addition to chronic lid inflammation, can lead to scarring of the window of the front of the eye (cornea), which can lead to visual loss.