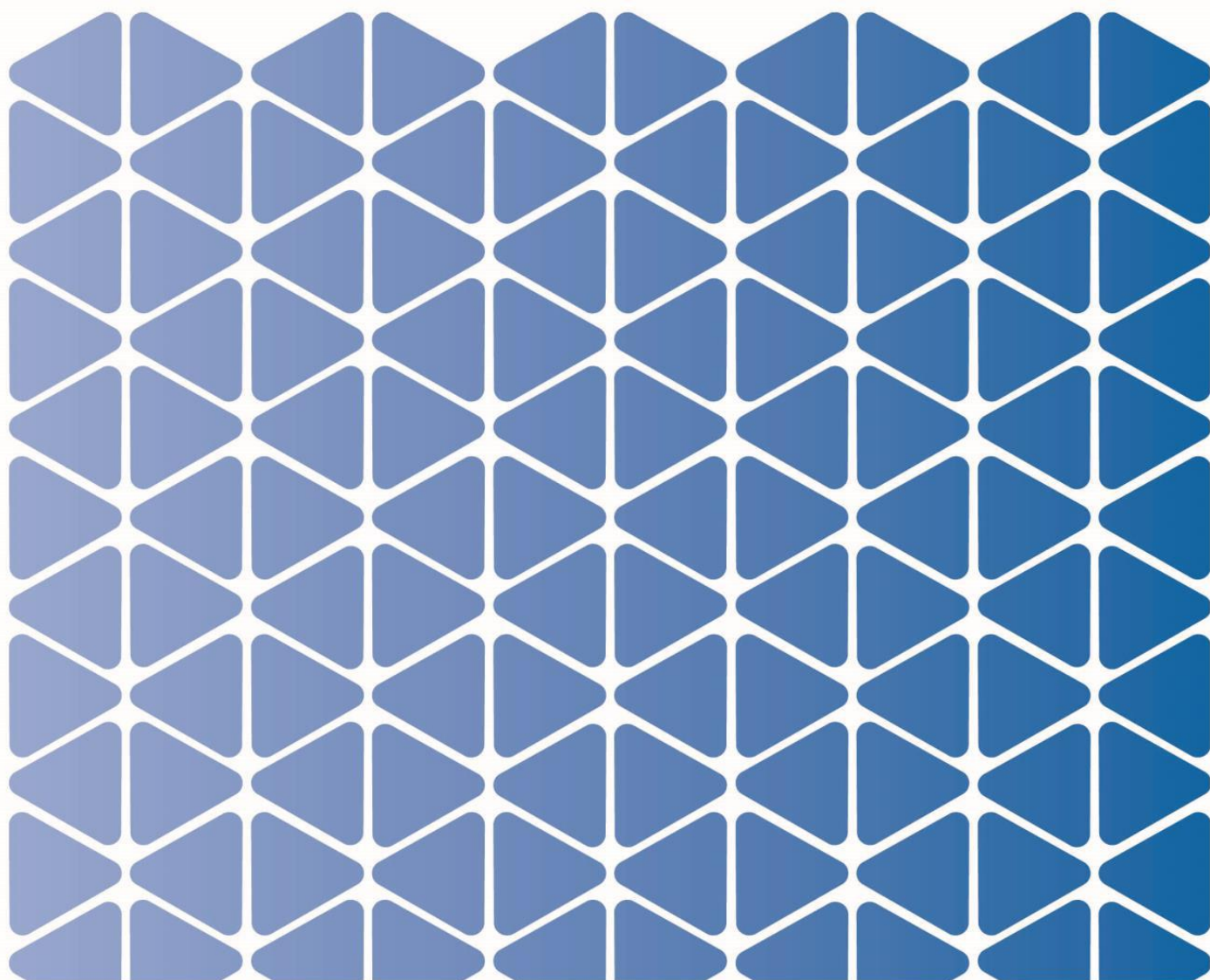




PATIENT INFORMATION

DRY EYE AND BLEPHARITIS – Treatment Guide



Introduction

In this leaflet we will describe a group of problems that commonly cause people's eyes to be sore or uncomfortable. A person may be affected by more than one problem at the same time. Dry Eye and blepharitis rarely cause severe disease but it is very common to have occasional mild symptoms, and these may be 'normal'. People who are affected often have long-term symptoms, although these may come and go. In general, there is no easy cure, but this leaflet explains how symptoms may be controlled.

How Do Tears Work?

A film of tears covers the cornea (the clear window at the front of the eye). The cells at the surface of the cornea have to be healthy for the tear film to work properly. Most of the tear film is a layer of salt-water, which is made by the tear glands (lacrimal glands). The salt-water contains mucus to help the tears wet the eye. This watery layer is covered by a thin layer of oil, which keeps it stable and stops it evaporating too quickly. The oil is made by small glands (Meibomian glands – say 'My-bow-me-an'). These glands are arranged in rows along the length of the upper and lower eyelids. The glands open onto the edges (margins) of the eyelids, just behind the lashes.

At the inner end of each eyelid is a tiny hole (punctum) through which the tears drain away. Blinking pumps tears through these holes into a sac, and then down a passage into the nose. Eyes may be watery because the tears do not drain away properly. Eyes may also be watery because extra tears ('reflex' tears) are being produced (in addition to the usual, slow, 'baseline' production of tears). Reflex tears are made in response to irritation or emotion. There are many causes of persistent irritation.

What is Dry Eye and What Causes it?

'Dry Eye' means the tear film is abnormal. Dry Eye may cause symptoms of dryness, grittiness or soreness, often worse with reading or computer use. The irritation may cause extra tears to flow so that, surprisingly, watery eyes may be due to Dry Eye.

The commonest cause of Dry Eye is Meibomian Gland Dysfunction (see below). Dry Eye may also be due to a poor baseline flow of watery tears. This is known as KCS (keratoconjunctivitis sicca). People with KCS often also have a dry mouth. Unless KCS is very severe, the eyes may still become watery if they are irritated. Dry Eye may also be due to lack of healthy mucus in the tear film.

Dry Eye is sometimes due to the surface cells of the cornea being unhealthy, for example, due to a damaged nerve supply following shingles or herpes simplex infection in the eye, or following laser surgery for short sight.

It is also important that the eyes should fully close during a blink and that they should be fully closed during sleep.

What is Meibomian Gland Dysfunction (MGD)?

When the oil glands in the eyelids are not working properly the eye has MGD. MGD can affect people of any age. It may be due to aging of the glands or it may be due to the

glands making a thick grease instead of a healthy runny oil. When the oil layer of the tear film is not healthy, the water in the tears evaporates too quickly and the salt becomes too concentrated. This may cause inflammation.

What is a Chalazion (Meibomian Cyst)?

A Meibomian gland may be blocked by grease so that a cyst forms behind the blockage. This Meibomian cyst is also called a 'chalazion' (say 'kal-ay-zee-on'). It often starts with inflammation as an 'internal sty' . When the inflammation settles there is often a lump left behind. The inflammation may recur and usually lasts about 3 weeks. In general, antibiotics do not make it get better more quickly, but hot compresses may help (see Table 1 below). If the chalazion is present for more than 6 months, it can be treated with surgery on the NHS. If surgery is not done, a chalazion usually takes between 3 months and 3 years to disappear. In a child under age 6, a chalazion in an upper lid may need more urgent surgery.

What is Blepharitis?

Blepharitis (say 'blefa-rye-tiss') is inflammation of the edge (margin) of the eyelid. Mild blepharitis is common and, if it is not causing any symptoms, it may not need treatment. Mild blepharitis may involve grease and / or tiny scales of dead skin collecting near the roots of the eyelashes. When blepharitis is worse, there may be irritation, itching, redness and crusting affecting the lid margin, and loss of eyelashes. Irritation of the cornea may cause a gritty feeling, which often happens if bacteria infect the lid margin. Blepharitis is often associated with MGD. If cataract surgery is planned, it is important that blepharitis is controlled before the operation.

Ocular Rosacea and Blepharokeratoconjunctivitis (BKC)

Rosacea is a long-term skin condition that causes flushing of the cheeks and a 'rosy cheeks' appearance. If it gets worse, spots like acne can appear. Rosacea is often associated with MGD and may cause inflammation and scarring of one or both corneas. In children, a similar disease (BKC) generally occurs without any rosacea of the skin. In a child with MGD and / or blepharitis, BKC may cause one or both eyes to develop watering, redness or sensitivity to light. If BKC is suspected, the eyes may need to be examined within a few days.

What is wrong with my eyes?

The doctor can indicate in the list below, the things that may be problems for your eyes. Not all of them will apply to you.

- | | |
|--|---|
| <input type="checkbox"/> unhealthy surface cells of the cornea | <input type="checkbox"/> blepharitis |
| <input type="checkbox"/> loss of nerve supply to the cornea | <input type="checkbox"/> bacteria on the lid margin |
| <input type="checkbox"/> lack of healthy mucus | <input type="checkbox"/> eye not closing properly |
| <input type="checkbox"/> lack of salt-water tears | <input type="checkbox"/> irritation from eye drops |
| <input type="checkbox"/> unhealthy layer of oil (MGD) | <input type="checkbox"/> ocular rosacea / BKC |

What Treatments Should I Use?

Different treatments are suitable for different people and treatment may change if the problem changes. Treatment may be needed long-term. If symptoms go away, it may be possible to reduce or stop treatment, but it is often necessary to start it again. If you have significant Dry Eye, it is best not to wear contact lenses.

Treatment are listed in the tables below. The doctor can indicate the recommended treatments for you at the present time. Please ask the doctor to explain if something is not clear to you. (It may help to bring this leaflet with you if you need a follow-up appointment in the eye clinic.) Wash your hands before doing any treatment to your eyes.

Table 1 – Lid Hygiene that the Doctor May Advise

Is this for me now?	Treatment	How to do it	How it works	Comments
Yes No Maybe	Hot Compresses Step 1 of 'lid hygiene'. Do once or twice a day (Do four times a day for an inflamed cyst.)	Wet a cotton pad with hot tap water (not uncomfortably hot). Hold it against the closed eyelids for 40 seconds. Repeat 10 times, reheating each time – this takes about 8 minutes in total. Or buy an eye mask for heating in a microwave - preferably a washable mask.	The heat melts grease in the Meibomian glands and on the lid margins.	Heat eye masks must be used hygienically. Apply to closed eyelids for 6 minutes. Children may prefer that only one eye at a time is covered with a mask. If so, for the second eye, a shorter microwave time will make the mask comfortably hot again.
Yes No Maybe	Fingertip Massage Step 2 of 'lid hygiene'. Do immediately after hot compresses.	With a fingertip, stroke the upper lids downwards towards their edges and the lower lids upwards towards their edges. Do this all along the lengths of the lids, using comfortable pressure. Or, for the same effect, roll a cotton bud on the lids.	Squeezing the oil out of the Meibomian glands helps prevent them blocking up.	Ask advice before doing this after an operation on the eye. Use vertical strokes all along each eye lid - only once for each treatment session.
Yes No Maybe	Lid Margin Scrubs Step 3 of 'lid hygiene'. Do once or twice a day.	In front of a mirror, pull the lid slightly away from the eye. Wipe firmly along the lid margin using cotton buds moistened in warm water that has recently been boiled. Use a new cotton bud for each wipe. (Water from a hot tap may be safe if it is from a 'combi' boiler and not from a storage tank.)	Cleans away grease, scales and crusts. In some cases, especially for the first week, it may help to use a drop of baby shampoo in half a cup of water. Some people buy special eye swabs.	You may need help for the upper lids (or you can scrub the outer part of the lid margins while the eye is gently closed). Baby shampoo and eye swabs contain detergent, which may affect the oily layer of the tear film.
Yes No Maybe	Glasses and Sunglasses	Wear glasses or sunglasses with a 'wrap around' style or with shields fixed to the side arms.	Close fitting glasses will reduce the evaporation of your tears	(If you do not need glasses for vision, you can get some with plain glass lenses.)

Table 2 – Other Things that the Doctor May Advise

Is this for me now?	Treatment	How to do it	How it works	Comments
Yes No Maybe	Artificial Tears (Available without prescription). Preservative free drops may be best, but drops with a 'biodegradable' preservative such as (Purite or Oxyd) may be acceptable. If a bottle is 'stiff', a 'bottle squeezing aid' may be available.	Preservative free drops may be used as often as you wish. For a bottle, check how long after opening it will stay safe to use, and write down the date you open it. Some drops come in individual packets. Use drops more often in air-conditioned rooms or when using a computer.	Drops make the tear film more stable and dilute it when it becomes too concentrated. Some drops add oil to the oily layer or have other actions.	Thicker drops or gels may blur the vision for a short time. If you wear contact lenses, check if your drops are suitable. Drops with preservatives may irritate the eye, especially if the drops are used more than 5 times a day.
Yes No Maybe	Lubrication During Sleep You can buy preservative free lubricant ointments without prescription, for example, Hylo-Night or Xailin Night.	Put ointment inside the lower lid just before sleep. If you use eye drops at night, give the drops enough time to soak in before putting in the ointment (a gap of at least 4 minutes).	The eye will open more easily on waking. An ointment may protect the eye- if it is not fully closed during sleep.	Ointment may make your vision blurred when you wake up.
Yes No Maybe	Adjust Your Diet Increase omega-3 fatty acids in your diet. For example, by eating oily fish 2 or 3 times a week.	The best omega-3 is in oily fish, such as salmon, trout, sardines and mackerel. Omega-3 is also found in flaxseed, chia seeds and walnuts.	It may take three months for you to notice a benefit.	You can buy Omega-3 dietary supplements, such as Flaxseed Oil. They are not licensed medicines so buy them from a place you trust.
Yes No Maybe	Think about any Make-Up you use	Do not let eyeliner get behind the line of the eyelashes. Remove all traces of cosmetics with an oil-free eye make-up remover.		Follow advice on how long make-up products may be used after opening.

Table 3 – More Things that the Doctor May Advise

Is this for me now?	Treatment	How to do it	How it works	Comments
Yes No Maybe	Find out if any Oral Medicine you take can make Dry Eye worse	Read the medicine information leaflets. Discuss with your eye doctor or GP.	Some medicines may cause Dry Eye (and dry mouth). An alternative medicine may be suitable.	Do not stop a prescribed medicine without the advice of your GP.
Yes No Maybe	Think about any other Eye Drops you take	Some eye drops may irritate the surface of the eye. Discuss with your eye doctor.	Sometimes an alternative eye drop may be more suitable.	Do not stop a prescribed eye drop without the doctor's advice.
Yes No Maybe	Punctum Plugs	The doctor will put in anaesthetic eye drops and then insert a plug into each lower punctum. If this treatment is successful, the doctor may fit 'long term' plugs or may block off a punctum with surgery (cautery).	Plugs slow or stop tear drainage. Some plugs are temporary as they dissolve after a few months. Other plugs work until they are removed (or fall out).	Plugs may fall out. Some plugs may occasionally scratch the eye. Plugs may make the tear film stagnant. Eyes may be very watery if reflex tears cannot drain away. Some plugs may become coated in a film containing bacteria.

Table 4 – Other treatments that the Doctor May Advise

Is this for me now?	Treatment	How to do it	How it works	Comments
Yes No Maybe	Ointments or Drops for the Lid Margins (Edges) (Antibiotic or Steroid or Both)	Just before sleep, squeeze some ointment onto a cotton bud and then apply it along the lower lid margin. If using a drop, soak a cotton bud in the drop and use it to wet along the lid margin. (When you close your eyes, the treatment will spread to the upper lid margin).	Bacteria may be cleared by antibiotics (such as chloramphenicol). Treatment may be repeated - perhaps for the first 6 days of each month. Steroids reduce inflammation.	Steroid ointments (such as betamethasone and dexamethasone) have risks. Follow instructions and have your eyes checked as advised by your eye doctor.
Yes No Maybe	Low Dose Antibiotic By Mouth	Treatment may be once a day for many months.	Some antibiotics have an extra benefit besides their action on bacteria.	Antibiotics may cause a stomach or bowel upset (seek advice if you take the contraceptive pill). Thrush (Candida) may occur. Tetracycline type medicines may cause headache or rash with sunlight.
Yes No Maybe	Lower Lid Skin Care	Each morning, with your fingertip, pick up a very small amount of petroleum jelly (such as Vaseline) and rub it into the skin of the lower lid in an upward and inwards direction.	This treatment protects the skin from irritation by tears. It helps to keep the lower punctum resting against the eye.	This treatment is not for use in the eye or on the edge of the eyelid.
Yes No Maybe	Steroids or ciclosporin (Ikervis or Verkazia)	Apply eye drops inside the lower eyelid. Do not use more often than advised by the doctor. You must keep being checked in the Hospital Eye Service	These drops act against inflammation.	Steroids may cause cataract and glaucoma. Steroids reduce your body's defences against serious eye infection. Ciclosporin often stings.

Contact Details

If you have any specific concerns that you feel have not been answered and need explaining, please contact the following.

- Eye Department at Worcester (01905) 733569
- Eye Department at Kidderminster (01562) 512382

Other Information

The following internet websites contain information that you may find useful.

- www.worcsacute.nhs.uk
Worcestershire Acute Hospitals NHS Trust
- www.patient.co.uk
Information fact sheets on health and disease
- www.rcoa.ac.uk
Information leaflets by the Royal College of Anaesthetics about 'Having an anaesthetic'
- www.nhsdirect.nhs.uk
On-line health encyclopaedia

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.