

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 any quicker, 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.

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"/> too many demodex (see Table 3) |
| <input type="checkbox"/> lack of salt-water tears | <input type="checkbox"/> eye not closing properly |
| <input type="checkbox"/> unhealthy layer of oil (MGD) | <input type="checkbox"/> irritation from eye drops |

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 about 12 times (takes 10 minutes). Or, buy a heat eye mask – preferably washable.	The heat melts grease in the Meibomian glands and on the lid margins.	Heat eye masks must be used hygienically. Children may prefer only one eye being covered with a mask. If so, let the mask fully cool down before heating it again for the second eye.
Yes No Maybe	Fingertip Massage Step 2 of 'lid hygiene'. Do immediately after a hot compress.	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.	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 been recently 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 a storage tank.)	Cleans away grease, scales and crusts. In some cases, but only 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 some eye swabs contain detergent, which can damage 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. (If you do not need glasses for vision, you can get some with plain glass lenses.)	Close fitting glasses will reduce the evaporation of your tears.	

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	<p>Artificial Tears</p> <p>(Available without prescription.) Preservative free drops may be best, but drops with a 'biodegradable' preservative (such as Purite or Oxyd) may be alright. If a bottle is 'stiff', a 'bottle squeezing aid' may be available.</p>	<p>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.</p>	<p>Drops make the tear film more stable and dilute it when it becomes too concentrated.</p> <p>Some drops add oil to the oily layer or have other actions.</p>	<p>Thicker drops or gels may blur the vision for a short time. If you wear contact lenses, check if your drops are suitable.</p> <p>Drops with preservatives may irritate the eye, especially if the drops are used more than 5 times a day.</p>
Yes No Maybe	<p>Lubrication During Sleep</p> <p>(Ointments available without prescription.)</p>	<p>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).</p>	<p>The eye will open more easily on waking. An ointment may protect the eye if it is not fully closed during sleep.</p>	<p>VitA-POS, Simple Eye Ointment or Lacri-Lube are suitable – they are preservative free. Ointment may make your vision blurred when you wake up.</p>
Yes No Maybe	<p>Adjust Your Diet</p> <p>Reduce omega-6 fatty acids in your diet and increase omega-3.</p> <p>(Butter and olive oil are fine.)</p>	<p>Omega-6 are in most vegetable oils and many processed foods. Omega-3 are in oily fish, such as tuna, sardines, mackerel and salmon.</p>	<p>It may take three months for you to notice a benefit.</p>	<p>Dietary supplements may be bought – ask for advice. They are not licensed medicines so buy them from a trusted source.</p>
Yes No Maybe	<p>Think about any Make-Up you use</p>	<p>Do not let eyeliner get behind the line of the eyelashes. Remove all traces of cosmetics with an oil-free eye make-up remover.</p>		<p>Follow advice on how long make-up products may be used after opening.</p>

Table 3 - More Things that the Doctor May Advise

Is This For Me Now?	What To Do	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.
Yes No Maybe	Try to Reduce Demodex (tiny mites that live in skin) Cliradex wipes are advised twice daily – they sting. Optase TTO lid wipes are cheaper.	Stroke the wipe repeatedly along the closed eye lids as directed. A daily lid margin scrub (Table 1) may help (do it before using the wipe). Alternatively, scrub the lid margins with a cotton bud moistened with tea tree oil diluted with a carrier (such as walnut oil). For example, for 20% strength, mix one part tea tree oil with four parts carrier. Demodex hide from light so treating them in the night may be best.	Everyone has some Demodex in their skin. It is not proven that they are harmful. In some people, reducing Demodex might improve their blepharitis. It may help to avoid eye make-up, and to hot-wash pillowcases etc.	These products are not licensed medicines and their safety is uncertain (especially if used long term). A trial of ivermectin by mouth may suggest that Demodex may be worth treating.

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 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. (When you close your eyes, the ointment will spread to the upper lid margin.)	Bacteria may be cleared by antibiotics such as chloramphenicol. Treatment may be repeated – perhaps for the first 10 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 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 Ikervis (ciclosporin)	Apply 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. Ikervis 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 Redditch (01527) 507915
- 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 Anaesthetists about 'Having an anaesthetic'
- www.nhsdirect.nhs.uk
On-line health encyclopaedia

Patient Services Department

It is important that you speak to the department you have been referred to (see the contacts section) if you have any questions (for example, about medication) before your investigation or procedure.

If you have any concerns about your treatment, you can contact the Patient Services Department on 0300 123 1733. The Patient Services staff will be happy to discuss your concerns and give any help or advice.

If you have a complaint and you want it to be investigated, you should write direct to the Chief Executive at Worcestershire Acute Hospitals NHS Trust, Charles Hastings Way, Worcester WR5 1DD or contact the Patient Services Department for advice.

Please contact Patient Services on 0300 123 1733 if you would like this leaflet in another language or format (such as Braille or easy read).

Bengali

“আপনি যদি এই লিফলেটটি বিকল্প কোনো ভাষায় বা ফরমেটে (যেমন ব্রেইল বা সহজ পাঠ) চান, তাহলে এই নম্বরে 0300 123 1733 প্যাশেন্ট সার্ভিসের সাথে যোগাযোগ করুন।”

Urdu

“اگر آپ کو یہ دستی اشتہار کسی متبادل زبان یا ساخت میں چاہیے (جیسے کہ بریل / ایڑی ریڈ) تو پبلیشمنٹ سروسز سے 0300 123 1733 پر رابطہ کریں۔”

Portuguese

“Por favor, contacte os Serviços de Apoio ao Paciente através do número 0300 123 1733, caso precise deste folheto numa língua alternativa ou formato (como Braille / fácil de ler).”

Polish

"Jeżeli pragniecie Państwo otrzymać tę broszurę w innym języku lub formacie (Braille / duży druk) proszę skontaktować się z Obsługą Pacjentów pod numerem 0300 123 1733."

Chinese

"如果您需要此份傳單的其他語言選擇或其他版本

(如盲人點字版/易讀版容易的閱讀),請致電 0300 123 1733 與病患服務處聯繫。"

Comments

We would value your opinion on this leaflet, based on your experience of having this procedure done. Please put any comments in the box below and return them to the Clinical Governance Department, Finance Department, Worcestershire Royal Hospital, Charles Hastings Way, Worcester, WR5 1DD.

Name of leaflet: _____ Date: _____

Comments:

Thank you for your help.