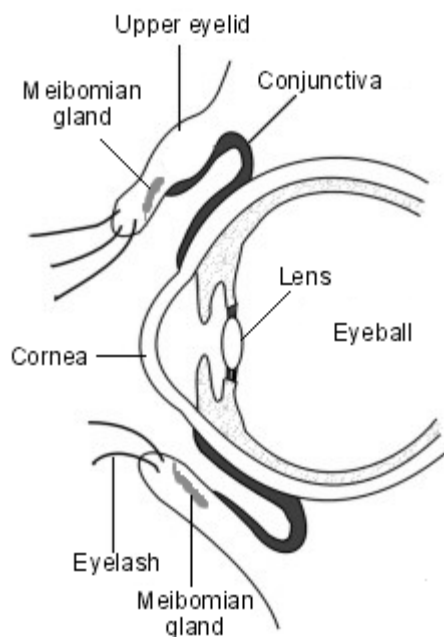




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Blepharitis means inflammation of the eyelids. It can be a troublesome and recurring condition with no one-off cure. However, once symptoms have improved, daily eyelid hygiene can usually keep symptoms to a minimum. Eyesight is rarely affected.

### What is blepharitis?



Blepharitis is an inflammation of the eyelids. It usually affects the edges (margins) of the eyelids. It is not usually serious, but may become an uncomfortable, irritating problem. Blepharitis is typically chronic (persistent). Both eyes are usually affected.

### What causes blepharitis?

There are three main types of blepharitis: staphylococcal blepharitis, seborrhoeic blepharitis and meibomian blepharitis. All three types can cause similar symptoms.

#### **Staphylococcal blepharitis**

This type of blepharitis is thought to be caused by a bacterium (germ) called staphylococcus. This bacterium commonly lives in low numbers on the skin without doing any harm. However, in some people, it seems that this bacterium causes a localised infection of the eyelids, resulting in blepharitis. Exactly why this happens in some people is unclear.



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#### **Seborrhoeic blepharitis**

Seborrhoeic blepharitis is closely associated with a skin condition called seborrhoeic dermatitis. In seborrhoeic dermatitis, the affected skin becomes more oily and can become scaly. Seborrhoeic dermatitis typically causes bad dandruff and sometimes a rash, commonly on the face and upper body. The underlying cause of seborrhoeic dermatitis is not clear. A type of yeast called *Malassezia furfur* is involved. However, it is not just a simple skin infection and it is not contagious (you cannot catch this condition from others). This yeast lives in the sebum (oil) of human skin in most adults and usually does no harm. However, in some people the yeast seems to trigger an inflammatory reaction, causing the blepharitis.

#### **Meibomian blepharitis**

This is also known as meibomian gland dysfunction. The tiny meibomian glands in the eyelids lie just behind the eyelashes. You have about 25-30 meibomian glands on each upper and lower eyelid. They make a small amount of oily fluid which comes out on the inside of the eyelids next to the eye. This oily fluid forms the outer layer of the tear film which lubricates the front of the eye. People with meibomian blepharitis are thought to have a slight problem with their meibomian glands and the fluid they produce. This may lead to eyelid inflammation. (This also explains why people with meibomian blepharitis often have dry eyes as the fluid they make may not be adequate to lubricate the eye.)

#### **Combinations of the above**

In practice, it is often not possible to tell the difference between the above causes. Indeed, seborrhoeic blepharitis commonly occurs together with meibomian blepharitis. Furthermore, skin which is inflamed in any way is more likely to become infected by staphylococcus. So, all three causes may contribute to each case of blepharitis, with the *main* cause varying.

#### **A vicious cycle**

People with blepharitis tend to have flare-ups of symptoms from time to time. As mentioned, blepharitis is usually a long-term (chronic) problem, and its causes are usually chronic too. Sometimes a vicious cycle plays a part. Typically, you rub your slightly sore and inflamed eyelids, further irritating them, causing more inflammation. This results in your eyelids becoming more sore and itchy, and the temptation to rub them even more increases, which causes more inflammation, and so on.

## What are the symptoms of blepharitis?



## Patient information leaflet

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- The main symptom is sore eyelids. Both eyes are usually affected.
- The eyelids may look inflamed or greasy.
- The eyes may become sticky with discharge. In particular, the eyelids may stick together in the morning.
- Sometimes tiny flakes or scales appear on the eyelids which look like small flakes of dandruff. Crusts may develop at the base of eyelashes.
- One or more of the tiny glands of the eyelids (meibomian glands) may block and fill with an oily fluid.

Symptoms often come and go. Typically, symptoms flare up from time to time, but you may have long periods without any symptoms.

Three other conditions are commonly associated with blepharitis. They are:

- **Dry eye syndrome (keratoconjunctivitis sicca).**
- **Seborrhoeic dermatitis** - described above.
- **Rosacea.** Symptoms include facial flushing, spots, and central facial redness.

See separate leaflets called '*Seborrhoeic Dermatitis of Adults*', '*Dry Eyes*' and '*Rosacea*' for further information.

## What are the possible complications of blepharitis?

In most cases, blepharitis is uncomfortable but not serious or sight-threatening.

Complications are uncommon. They include:

- Chalazion (meibomian cyst). This is a painless swelling, most prominent on the *inside* of the eyelid. It is due to a blocked meibomian gland. Although it is painless, it may make the eyelid bulge and look a little unsightly. It can easily be treated. Sometimes a chalazion can become infected and painful. See separate leaflet called '*Chalazion*' for further information.
- Stye. This is a painful infected swelling most prominent on the *outside* of the eyelid. It is due to an infection of the follicle (root) of an eyelash. See separate leaflet called '*Stye*' for more information.
- Contact lens wearers may find their lenses feel uncomfortable when they have a flare up of blepharitis.
- Changes to the eyelashes (which mainly occur in severe and long-standing cases). These include:
  - Loss of eyelashes (madarosis).
  - Misdirection of eyelashes towards the eye (trichiasis).
  - Depigmentation of the eyelashes (poliosis).



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- Eyelid ulceration and scarring (uncommon). This can cause the eyelid to turn inwards against the eyeball (entropion) or outwards (ectropion).
- Conjunctivitis (inflammation of the front of the eye). This may cause a sore, red eye with discharge or watering. See separate leaflet called '*Conjunctivitis - Infective*' for more information.
- Conjunctival phlyctenules. These are small (1-3 mm), hard, triangular, yellowish-white nodules (lumps) surrounded by prominent but tiny blood vessels. If they develop they usually occur on the lower part of the eye just below the cornea. They consist of white blood cells that collect in response to bacterial infection - such as staphylococcus.
- Corneal inflammation (keratitis), ulceration, and scarring. This complication is rare but serious as it can affect sight. See a doctor urgently if you develop eye pain (more than the irritation/grittiness of dry eye) or any loss of vision from the affected eye.

## What is the treatment for blepharitis?

There is no one-off cure for blepharitis, as the inflammation tends to recur if you do not keep up with treatment. However, with regular treatment, symptoms can usually be eased and then kept to a minimum. This tends to prevent flare-ups. The main treatment is regular eyelid hygiene (see below). Other treatments that may be needed include antibiotics, steroid creams (occasionally) and specific treatment for associated conditions.

## Regular eyelid hygiene

This is the most important part of treatment and prevention of blepharitis. The aim is to soothe the eyelids, unplug any blocked meibomian glands and clear out any stagnant oily secretions from these glands. The eyelids are cleaned and debris is removed. This is a daily routine that consists of three parts - warmth, massage and cleansing. Remove any contact lenses before following the routine.

### Warmth

The purpose of warmth is to soften the skin and any crusts attached to the eyelids. It also allows the oily secretions made by the meibomian glands to flow more freely, as warmth makes oils more runny. Therefore, warmth helps to unplug any blocked glands and allow the oily secretions to flow more readily. Warmth applied to the eyelids for about five minutes is sufficient to do this.



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The traditional method is to press on the eyelids gently with a flannel (facecloth) soaked in very warm water for 5-10 minutes. If the flannel cools, keep re-warming it in the warm water.

A popular alternative is to use a specially designed reusable heat bag which you place over your eyes for about five minutes. The EyeBag®, which you can buy from certain opticians or online, is one such product. The heat bags are warmed in a microwave. The advantage of a heat bag over a hot flannel is that the heat is retained for many minutes and so it keeps a constant warmth over the eyes. You can simply lie down and relax for five minutes with the bag placed over your eyes. (A hot flannel usually cools quickly.)

### Massage

Massage the eyelids immediately after applying the warmth. Massaging helps to push out the oily fluid from the tiny meibomian glands. To massage the eyelids ...

- Use your index or middle finger and sweep the pad (fingertip) of that finger from the inner corner of the eye along the eyelid to the outer corner of the eye.
- Start with the upper lid. Put the finger pad in the corner of the eye next to the nose, just resting on the eyelid above the lashes. Then sweep the finger gently but firmly along the eyelid to the outer end.
- Repeat this with the lower lid, placing the pad of the finger just below the lashes in the corner of the eye and sweeping outwards towards the temple.
- Repeat this sweeping massage action 5 to 10 times over about 30 seconds immediately following the warming.
- Massaging should neither to be too gentle nor too firm. It should be relatively comfortable and you should not press hard enough to actually hurt your eyeball under the closed lids. Always massage with the eyes shut.

### Clean

After warmth and massage, clean the eyelids. This can be done by any of the following ways. There is a lack of research studies to say which is the best method, so use whatever you find most useful:

- The traditional way is to use a cotton wool bud that has been dipped in diluted baby shampoo. Just add a few drops of baby shampoo to a small cup of warm water so that the ratio of water to shampoo is about 10:1. Squeeze out excess liquid from the cotton bud to prevent drips getting into your eyes, which may irritate. In particular, try to clean off any crusts at the base of the



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eyelids. After cleaning the eyelids with the cotton wool bud, wash off the shampoo from the eyelids, using a flannel or cloth.

- Some people recommend using sodium bicarbonate (a teaspoonful in a cup of cooled water that has recently been boiled). This is applied using a clean cloth or cotton wool bud.
- Some people recommend using special eyelid scrubs that you can buy at some opticians/optometrists.
- Some people say that simply washing the eyelids with cooled water that has recently been boiled (or preserved water for contact lens wearers) is probably as effective as using water with added sodium bicarbonate or baby shampoo.

You should do the above routine - warmth, massage, clean - at least twice a day until symptoms settle. When the symptoms have eased, keep doing this routine once a day, every day, to prevent further flare-ups. If you are prone to blepharitis it is best to think of this as part of your daily routine - just like brushing your teeth. This is the best way to keep symptoms away, or to a minimum.

## Antibiotic treatments

Antibiotic eye ointment or drops may be advised for a while if an eyelid becomes infected. If you are prescribed ointment, place it on the edge of the eyelid (not the eye) after cleaning the eyelid in the way described above. Antibiotic tablets are also commonly used for troublesome infected eyelids. **Note:** a three month course of antibiotics is typically used in the treatment of blepharitis.

## Other things to consider

Rubbing your eyelids may make inflammation worse, so try to avoid doing this. As mentioned above, blepharitis commonly develops in people with seborrhoeic dermatitis, rosacea or dry eye syndrome. If relevant, treatment of these other conditions may also help to ease symptoms of blepharitis.