



# **Uveitis**

# **Patient information leaflet**

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## What is uveitis?

Uveitis is an eye condition where the coloured part of the eye, called the uvea, gets inflamed. The uvea is made up of three main parts:

- Iris the coloured part of the eye which has the pupil in the centre
   and it controls the amount of light entering the eye
- Ciliary body is the body of tissue behind the iris and is attached to the lens. Its main function is to produce the fluid in the eye called 'the aqueous humour'.
- Choroid the tissue layer that is lining the back of the eye and is rich
  in blood vessels that supply nutrients to the retina (the overlying lightsensitive tissue at the back of the eye).

Uveitis can affect either or all of the above tissues:

- Anterior uveitis (also known as iritis or irido-cyclitis) inflammation of the iris and/or ciliary body.
- Intermediate uveitis inflammation of the part of the ciliary body behind the lens and the inflammation manifests mainly in the vitreous cavity (gel like substance that fills the cavity of the eyeball)
- Posterior uveitis inflammation of the choroid or retina
- **Panuveitis** inflammation of all the layers of the uvea (i.e. of the entire eye)

# What are the symptoms of uveitis?

The symptoms vary depending on which type of uveitis you have. Common symptoms include: pain, redness, sensitivity to bright lights, reduced vision and floaters.

#### What causes uveitis?

Uveitis may occur due to a number of reasons:

- **Idiopathic:** This means that there is no identifiable cause for the uveitis, which is the case in 60% to 90% of cases.
- Inflammatory conditions: Conditions of inflammation in other parts of the body, often of an autoimmune nature, can sometimes be associated with uveitis. These include conditions such as sarcoidosis and autoimmune conditions e.g. ankylosing spondylitis, sarcoidosis, Crohn's disease, ulcerative colitis, and Reiter's syndrome.
- Infections: This may be due to bacteria, viruses, fungi or parasites.
- Other causes: rarely, uveitis can be associated with trauma to the eye or even with some types of malignant growth within the eye.

# How is uveitis diagnosed?

It is most often diagnosed following the clinical examination by your eye doctor in clinic. All patients will have their pupils dilated with eye drops to allow a thorough examination of the back of the eye.

Occasionally other tests may be needed, including:

 Blood tests – to identify any inflammation or infection elsewhere in the body.

- Chest x-ray or CT scan to identify any chest problems which may be associated with the uveitis.
- Optical coherence tomography (OCT) a laser scan that helps show any changes within the retina. It takes a few seconds to perform and is often done routinely in most clinics.
- Fundus fluorescein angiography (FFA) a special test to examine the circulation at the back of the eye. More information can be found in the FFA information leaflet.
- **Electrodiagnostic testing** this is a special test done to test how well the cells of the retina are working. This is usually only performed in certain cases of uveitis involving the back of the eye.
- Vitreous tap or biopsy —a sample of the vitreous gel is taken to look for causes of the uveitis that are not obvious otherwise. This is normally done under local anaesthetic as a day case.

#### How is uveitis treated?

Uveitis is usually treated with a course of eye drops.

• Steroids: This may be in the form of drops or tablets. The steroids are a group of anti-inflammatory medications that help reduce the inflammation in the eye. You will need to use steroid eye drops in a reducing manner for at least 4 to 6 weeks. This means you will start off using the drops more frequently (e.g. every hour), and as the inflammation improves, you will be advised to reduce the number of times you are using the drops. It is important to continue with the drops even when your symptoms improve, as stopping the steroid

drops suddenly can cause the inflammation to return. The steroid tablets will be given to you if the inflammation is severe or if it is affecting the back of the eye. Steroid drops and tablets can cause some side effects if taken for a prolonged period. This will be discussed with you should prolonged use of these medications be necessary.

- **Dilating eye drops:** These drops help with the eye pain by paralysing the muscles of the iris and ciliary body. It also helps to reduce the risk of the iris sticking to the lens which may lead to high eye pressure. These drops however will leave you with blurred vision and difficulty focussing especially at near because of the large pupil.
- Eye pressure lowering drops: If the eye pressure is high (which may happen in some cases of uveitis), this will need to be treated with extra eye drops.
- Antimicrobial medication: If the uveitis is due to an infection, you
  may need an antibiotic, antiviral or antifungal medications to treat the
  infection.
- Other immunosuppressive medications (tablets or injections): These are used in addition to or as an alternative to steroid tablets, in cases of severe or prolonged inflammation.
- Injections around the eye, or into the eye (intravitreal injections):
   These are performed under local anaesthetic, where the eye is numbed beforehand so the procedure should not be painful.
   Medications that are injected may include: steroids, antibiotics, antiviral or antifungal medications.

#### Will the uveitis come back?

Yes. Some patients can get recurrent uveitis – this means that the inflammation improves, but then comes back every few months. This is most likely to occur in cases of anterior uveitis (iritis or iridocyclitis). Some of the blood tests may help identify patients at risk of recurrent inflammation, but this is often difficult to predict accurately.

If you ever have symptoms of recurrence, you should ensure your eyes are examined promptly so it may be treated as quickly as possible to reduce the risk of complications.

### What are the complications of uveitis?

If uveitis is treated promptly, the risk of further problems can be reduced. However in prolonged or severe cases of inflammation, complications include:

- Raised eye pressure: This is often transient as a result of using the steroid drops and can be effectively treated with eye drops, tablets or rarely surgery.
- Cataract (clouding of the natural lens of the eye): This again results
  from the use of the steroid drops as well as the recurrent
  inflammation. If cataract causes significant blurring of vision or glare,
  it can be surgically treated.
- Macular oedema (swelling of the central part of the retina): This will cause blurring of central/reading vision and distortion (straight lines look bent or wavy).

- Floaters: This appears as black dots, lines or swirls that move across your field of vision. This is due to inflammatory cells or debris in the vitreous gel of the eye. The floaters should improve as the inflammation is treated. If the floaters are severe and have a significant impact on the vision, an operation called a vitrectomy can be performed to remove the vitreous gel and the floaters with it.
- **Retinal detachment:** This is rare, but may occur in some cases of posterior uveitis, especially if caused by an infection.

