

Having tests to find the cause of an inflamed eye socket (orbit)

Ophthalmology Department

Information for Patients

Last reviewed: December 2025

Next review: December 2028

Leaflet number: 183 Version: 3

Introduction

This leaflet has some of the most common questions asked about orbital inflammation. It tells you about what are the possible causes and likely tests which may be needed to help find the cause.

What is orbital inflammation?

The orbit is the eye socket that contains the eye, eye muscles, the tear gland, nerves, blood vessels and the fat tissue that cushions these structures. Orbital inflammation refers to any pain, redness, swelling or tenderness of these areas.

What causes an inflamed eye socket?

There are many reasons that can cause an inflamed eye socket. It can be:

- linked to another inflammatory disorder in your body.
- from an injury.
- an eye infection.
- thyroid eye disease.
- in some cases because of a undiagnosed tumour.

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.uhleicester.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact uhl-tr.informationforpatientsmailbox@nhs.net

What tests will I have?

Your healthcare team will ask you questions about your health. They will carry out a full medical examination to try and find out more about the cause of your orbital inflammation. They may do blood tests and scans of the eye area.

You may also need to have a biopsy. This is where we take a sample of the tissue from the area.

Sometimes after tests and investigations, we may not find a specific reason for the inflammation and it will settle with time.

What is an orbital biopsy and what does this involve?

We take a sample from the area of inflammation. We send this for testing to help find the cause of the orbital inflammation.

If the inflammation is behind the eyeball, we may need to take the sample while you are asleep under a general anaesthetic. This often takes about 1 hour to do.

If the inflammation is just behind the eyelid, it may be possible to have local anaesthetic to take out the sample. This means you will be awake and the area will be numbed. You should not feel any pain. The area is numbed using eye drops and a local anaesthetic injection.

If you are taking blood thinning medication, you may be asked to stop taking these before the procedure. This is to reduce the risk of bleeding.

After the biopsy procedure, you may need to be checked on the ward to make sure that you are well. You will often be able to go home on the same day.

The area where the tissue sample was taken from may feel sore for a few days and you may have some bruising. Paracetamol will help to relieve any pain that you may have.

We will give you an antibiotic ointment to apply to the operated area. You should apply this 3 times a day for 2 weeks.

We will give you a follow-up appointment in clinic within 7 to 14 days to check healing of the biopsy site.

The sample of tissue will be sent for testing. This often takes up to 2 weeks. Sometimes early results can be unclear and more tests may need to be carried out on the sample. This may take 2 to 3 weeks more.

Are there any risks from having an orbital biopsy?

Like any operation, there are some risks you need to be aware of. These include infection, bleeding, swelling of your eye/ eyelid and discomfort afterwards.

There is a very small risk to the loss of vision in that eye and for you to develop (or have worsening of) double vision.

What happens if a tumour is found?

There are many types of orbital tumours which can either be non-cancerous (benign) or cancerous (malignant). Benign tumours do not spread into surrounding tissue. Because of this they are not cancerous. A malignant tumour has cells which can spread beyond the original site.

The most common type of malignant tumour that sometimes causes orbital inflammation is known as orbital lymphoma. Orbital lymphoma is still quite rare.

We will need to do more blood tests or scans of the head and body before we can make a diagnosis.

If after tests and investigations you are diagnosed with lymphoma, you will be referred to the lymphoma team based at Leicester Royal Infirmary. The team may arrange for you to have more tests to find out the extent and spread of the cancer.

More information

Lymphoma Action is a UK charity which gives advice and support:

<https://lymphoma-action.org.uk/>

Contact details

Oculoplastic Specialist Nurse: 0116 204 7971 (Monday to Friday, 8am to 5pm)

Eye Casualty Department: 0116 258 6273

Monday to Friday: 8.30am to 4.30pm

Saturday, Sunday and Bank Holidays: 8.30am to 12.30pm

Lymphoma Clinical Nurse Specialist (Leicester Royal Infirmary): **0116 258 5738**
(Monday to Friday, 9am to 5pm)

