

# Uveitis screening in children with juvenile idiopathic arthritis

Paediatric Ophthalmology  
Orthoptics

## Introduction

This leaflet is intended for parents and carers to explain about your child's uveitis screening appointment. It aims to answer the questions that you may have about the test and about treatment for this condition.

## What is uveitis?

Uveitis is inflammation deep inside the eye, in the middle layer that carries the blood supply to other parts of the eye, called the uveal tract.

The uveal tract is made up of the iris (visible coloured part of the eye), ciliary body (muscle behind the iris) and choroid (layer of blood vessels inside the eye).

## What are the symptoms of uveitis?

There are usually no symptoms of uveitis in young children, which is why it is very important to attend all the screening appointments. Sometimes, older children with uveitis can be sensitive to light, notice blurred vision or see floaters in front of their eyes.

Signs of uveitis that parents and guardians can look out for include:

- Red eyes
- Sensitivity to light
- Abnormal looking pupils
- Clouding of the front surface of the eye (the cornea)
- Unusual blinking
- Excessive eye rubbing
- A new squint (when one eye does not look straight)
- Disinterest in tasks requiring visual attention (or paying preferential attention to hearing).

**The prevention of infection is a major priority in all healthcare and everyone has a part to play.**

- **Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available**
- **If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111**
- **Keep the environment clean and tidy**
- **Let's work together to keep infections out of our hospitals and care homes.**

## What causes uveitis?

When parts of the body become inflamed in autoimmune conditions (over activity of the immune system) this can cause inflammation in the eyes too. The inflammation in uveitis is similar to what happens to the lining of the joints in juvenile idiopathic arthritis (JIA). However, unlike in arthritis, inflammation in the eye is not always obvious in children.

## Why is screening for uveitis needed?

Your child may require screening for uveitis if they are being investigated for an autoimmune condition, or if they have had uveitis previously. Up to 30% of children with JIA may have uveitis.<sup>1,2</sup> The majority will keep normal vision providing they receive the correct treatment early on.

If your child has confirmed or suspected JIA they will be referred to a uveitis screening service for eye examinations. Even if the first check is normal, uveitis can develop later on.

Often in children there are no symptoms of uveitis and, if left undetected and untreated, uveitis can lead to complications including:

- Cataracts (clouding of the lens inside the eye)
- Glaucoma (damage to the optic nerve often caused by raised pressure in the eye)
- Cystoid macular oedema (swelling at the back of the eye)
- Amblyopia (impaired visual development).

Uveitis is a treatable condition. Sometimes however, the damage caused can be permanent.

## What happens at the uveitis screening appointment?

Your child will first have their vision tested in an age-appropriate way. This could be using letters, pictures or other tests designed for different ages and abilities. It will be carried out by an Orthoptist (eye care professional) who is experienced at measuring vision in children.

Your child will then be examined in the clinic by either an Orthoptic Advanced Clinical Practitioner (eye care professional who has received additional training to screen for uveitis) or Ophthalmologist (eye doctor).



Your child will be examined using a large magnification lens called a slit lamp as shown in the picture above<sup>3</sup>. It involves a light being shone at the eyes and is generally comfortable for children.

## How often should my child be tested?

Children with JIA should all have an initial eye examination within six weeks of diagnosis according to the British Society of Paediatric and Adolescent Rheumatology (BSPAR) and Royal College of Ophthalmologists (RCO).

Following the first eye examination, your clinician will advise you if and when we need to see your child again. In some cases, only a one-off screen is required, but usually your child will be asked to return for repeated screening examinations for several years. This will allow prompt detection and early treatment of any uveitis that may develop.

If uveitis is detected your child will need treatment for this, which usually involves eye drops. Your clinician will discuss with you how soon your child needs to be reviewed whilst on treatment.

## How is uveitis treated?

The main aim of treatment is to preserve vision. This is achieved with the use of regular steroid eye drops to calm the inflammation within the eyes. If the inflammation is severe, the eye drops can be very frequent for example, every two hours.

Eye drops that make the pupils large are also used. These drops help relax the iris (the coloured part of the eye) and help reduce pain, if present. They may also prevent the iris sticking to the lens.

If eye drops alone cannot control the inflammation, steroid tablets or steroid injections may be necessary, and will usually be prescribed by your Paediatrician. Medication such as Methotrexate may be needed in some children. This is usually given as an injection under the skin once weekly. Many treatments used to control arthritis will also help treat uveitis.

## What should I do if I notice signs of uveitis between appointments?

If your child complains of symptoms, or if you notice signs of uveitis between appointments, you should contact the Orthoptic department without delay. You may be given an appointment or be advised to attend the Eye Casualty department.

## What happens when my child is discharged from the hospital uveitis screening service?

When the risk of your child getting uveitis is low enough (often around the age of 12 years but this can vary), they will be discharged from the hospital screening service to an Optometrist (Optician) in the community for annual reviews. It is still very important to attend these reviews because the risk is never completely gone.

If you notice any signs or symptoms of uveitis after being discharged from the hospital service, you should still attend the Eye Casualty department to seek urgent eye advice.

## Useful information

- <https://jia.org.uk/resource/eye-health/>
- <http://oliviasvision.org>
- <https://uveitis.org/patients/support/kids/>

## References

1. Angeles-Han ST, Pelajo CF, Vogler LB, Rouster-Stevens K, Kennedy C, Ponder L, McCracken C, Lopez-Benitez J, Drews-Botsch C, Prahalad S, CARRA Registry Investigators. Risk markers of juvenile idiopathic arthritis-associated uveitis in the Childhood Arthritis and Rheumatology Research Alliance (CARRA) Registry. *The Journal of rheumatology*. 2013 Dec 1;40(12):2088-96.
2. Moradi A, Amin RM, Thorne JE. The role of gender in juvenile idiopathic arthritis-associated uveitis. *Journal of ophthalmology*. 2014;2014.
3. Slit lamp examination of the eyes. Jia at NRAS. [Online] 16 December 2021. <https://jia.org.uk/resource/slit-lamp-examination-of-the-eyes/>

## Contact information

### **The Orthoptic Department**

Wolverhampton Eye Infirmary, Location A33  
01902 695830 / 01902 695838  
Available Monday – Friday 08:00am – 6:30pm

### **Eye Casualty**

Wolverhampton Eye Infirmary, Location A34  
01902 695805  
Available 08:45am – 4:45pm Monday – Friday  
08:45am – 4:00pm weekends

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。