Scleritis

Scleritis is a serious inflammatory disease that affects the sclera, the white outer wall of the eyeball. It is often associated with autoimmune conditions and can lead to severe pain and vision loss.

It is important to note that scleritis and episcleritis are distinct conditions. Episcleritis is milder and relatively more common than scleritis. Episcleritis typically presents as localised redness over the outer part of the white of the eye. Unlike scleritis, episcleritis is less painful and often resolves spontaneously or with simple treatment within a short period.

Types of scleritis

Scleritis is divided according to its location and its features:

- ***Anterior scleritis (the front of your eye)***

Divided into **non-necrotising** and **necrotising** types

Non-necrotising anterior scleritis

- Diffuse - most common in which the entire white part of your eye looks red.
- Nodular - you may see a localised and slightly raised area of redness.

Necrotising anterior scleritis

- Rare but most serious type which needs urgent attention and care.
- It may cause scleral damage, resulting in a bluish hue due to thinning of the sclera, and can cause anterior bulging of the underlying choroid.

- ***Posterior scleritis (back of the eye)***

It is hard to detect because it involves the back of your eyeball. Your eye will be painful, however you may not notice any redness or swelling.

It is uncommon but potentially vision threatening and could cause loss of vision if not treated.

Causes of scleritis

There are several conditions that can cause scleritis:

- **Autoimmune:** This is the most common cause. Autoimmune diseases occur when the immune system mistakenly attacks the body's own tissues. Examples include rheumatoid arthritis (RA) and granulomatosis with polyangiitis (GPA).
- **Infectious:** Infections involving structures adjacent to the sclera can lead to scleritis, although this is a relatively uncommon cause.
- **Idiopathic:** In nearly half of cases, the cause of scleritis remains unknown.

How you might feel if you have scleritis

- **Redness:**
  The eye may appear dark red or reddish-purple, often affecting a localised segment of the sclera. In some cases, the redness is only visible by lifting the upper eyelid, while in others it may be more widespread.
- **Severe pain**:
  - The pain is typically deep and throbbing, often intense enough to wake you from sleep. It is usually not relieved by paracetamol and may worsen with eye movement. However, some cases may present without noticeable discomfort.
  - Blurred vision or vision loss: If left untreated, scleritis can lead to progressive visual impairment or permanent vision loss.
  - Photophobia: The eye may become sensitive to light, causing discomfort in bright environments.
  - Tearing: Excessive watering of the eyes may occur due to inflammation and irritation.

How scleritis is diagnosed

- **Eye examination:**
  Your doctor will examine you with the help of special instruments such as a slit-lamp biomicroscope which enables them to examine the eye closely. Assessment often includes phenylephrine eye drops, which temporarily reduce redness through vasoconstriction of superficial blood vessels. In episcleritis, the redness usually fades after application. If deeper scleral vessels remain visible after its application, this suggests true scleral inflammation, as these engorged vessels are unaffected by phenylephrine.

- **Imaging**:
  Your doctor might order various imaging tests to better visualise the structures inside and around your eye. These may include:
  - Anterior segment imaging and photographs of the sclera: Useful for documenting inflammation and monitoring changes over time.
  - Ultrasound scans (A-scan, B-scan, and UBM – Ultrasound Biomicroscopy) and anterior segment OCT (Optical Coherence Tomography): These provide detailed views of internal structures, deeper tissues, and scleral/corneal thickness.
  - Radiological imaging, such as a chest X-ray to investigate underlying systemic conditions, and MRI of the orbit and brain to assess surrounding tissues or confirm posterior scleritis.
- **Blood tests** Your doctor will also order different blood tests to find any association with systemic conditions and to screen for infective causes.
- In rare cases a sample from the sclera can be taken, via scraping or biopsy, to further investigate cases where treatment is ineffective.

How scleritis is treated

Your doctor will decide on the best treatment depending on the type and severity of your scleritis, as different types require different approaches.

➢ **Treatment for non-necrotising scleritis - non infective**

First line: Oral painkillers Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

- Medications such as ibuprofen or naproxen can help reduce inflammation and pain. These should only be used if there is no history of allergy, asthma, or stomach ulcers. It's generally advised to take ibuprofen with or shortly after a meal to reduce the risk of stomach irritation.

If NSAIDs don't work:

- **Topical steroids and NSAIDs**
  Some specialists may prescribe steroid and NSAID eye drops as part of the treatment plan.
- **Oral steroids**
  Prednisolone or similar corticosteroids may be used to control inflammation and swelling of sclera.

If inflammation persists:

Further steroid-free systemic immunosuppressive therapies may be used to help control disease activity, prevent progression, and maintain remission. These treatments are especially important in managing autoimmune conditions affecting the eye, such as scleritis, and fall into two main categories:

- **Disease-Modifying Agents:**
  These may be used as first-line systemic treatments. Examples include **methotrexate** and **mycophenolate mofetil**, which help reduce immune activity and inflammation.
- **Biologic Agents:**
  Biologics are advanced therapies that target specific components of the immune system. They are typically used in cases of eye disease that do not respond to conventional treatment.
  - **Adalimumab (ADA)** and its biosimilars (e.g. Amgevita, Imraldi) target tumour necrosis factor-alpha (TNF-α). These medications help reduce inflammation in both systemic diseases and isolated ocular conditions.
  - **Rituximab** targets CD20, helps suppress inflammation in conditions such as vasculitis by depleting a subset of white blood cells (B cells).

Treatment for necrotising scleritis

This severe and sight-threatening form needs immediate treatment with high-dose oral or intravenous steroids, with or without additional steroid-free immunosuppressants. This combination aims to prevent tissue damage and serious complications.

Scleromalacia Perforans

- A rare and difficult-to-treat type of necrotising scleritis, usually seen in people with rheumatoid arthritis. Eyes may not be red or swollen and can go un-noticed.

- **Surgical treatment**

This is rarely needed, but it may be considered if the wall of your eye becomes very thin or at risk of perforation.

Can scleritis be prevented?

Unfortunately, scleritis cannot be directly prevented. However, there are steps that can reduce the risk, especially in people with underlying health conditions

- Rheumatoid arthritis
- Granulomatosis with polyangiitis
- Sarcoidosis
- Or other autoimmune diseases

The best way to prevent scleritis is to:

- Keep your underlying disease well-controlled
- Take your medications regularly as prescribed
- Have regular check-ups with your rheumatologist or specialist
- Report any new eye symptoms early and protect your eye from trauma with shields until review

Early detection matters

Even though prevention isn’t always possible, early recognition and treatment of scleritis can prevent complications and preserve vision. See an eye doctor promptly if you notice:

- Redness
- Pain (especially deep, aching pain)
- Light sensitivity
- Changes in vision

Department address and contact information:

Available support and resources

https://www.rnib.org.uk/your-eyes/eye-conditions-az/uveitis/

https://www.rnib.org.uk/your-eyes/navigating-sight-loss/eye-care-services-and-roles/eye-care-liaison-officers-eclos/

Contact information: weekdays excluding bank holidays

Uveitis email address: uveitis@uhb.nhs.uk (08:00 – 17:00)

Jacqui Orpe, secretary: 0121 371 6905 (Monday, Tuesday, Friday)

Carolyn Rivera, specialist nurse: 07823 827040
(08:00 – 17:00, Monday, Tuesday, Wednesday, Thursday)

Hermy Skew, specialist nurse: 07388 711893
(08:00 – 17:00, Tuesday, Wednesday, Thursday, Friday)

Main ophthalmology outpatient clinic: 0121 371 6476, 0121 371 6477
(08:00 – 18:00, Monday to Friday)

Appointments team: 0121 371 6925, 0121 371 6787
(08:00 – 16:00, Monday to Friday)

Hospital Pharmacy: 0121 371 5479, 0121 371 5480

Homecare pharmacy (deliveries): 0121 371 3933

Out of hours: we do not provide an out of hours service.

In cases of emergency such as:

- sudden drop in vision
- sudden appearance of or increase in floaters (dots floating across your field of vision)
- flashing lights
- redness in the eye with severe pain and sensitivity to light
- appearance of a shadow or curtain across your vision with a drop in vision

Please contact or visit your local eye casualty. If you are a Birmingham resident, your local eye casualty is BMEC (Birmingham Midland Eye Centre). Please note that the average wait time can range from 2 hours to 6 hours.

Address: City Hospital, Dudley Rd, Birmingham B18 7QH.

Phone number: 0121 5076779

Opening hours:

8:30am – 7pm, Monday to Friday

9am – 7pm – Saturday

9am – 6pm – Sunday

Accessibility

To view this information in a different language or use text-to-speech reader visit **www.uhb.nhs.uk,** click the yellow and black circular icon in the bottom right of the web page to open the ReachDeck toolbar and then use the search bar to search by the name of the leaflet. If you require this information in another format such as braille, please email **interpreting.service@uhb.nhs.uk**.

How did we do? ☺😐☹

If you have recently used our services we'd love to hear about your experience. Please scan the QR code or follow the link to share your feedback to help us improve our services.
Thank you. www.uhb.nhs.uk/fft