

Acute anterior uveitis

BMJ 2009;339:b2986

▣ Acute anterior uveitis statistics

- Incidence 1 in 10 000

Just a quick reminder of the anatomy...

The uveal tract of the eye consists of the iris, ciliary body and choroid (the vascular layer between the sclera and the retina). However in anterior uveitis, as the name implies, the choroid in the posterior chamber is unaffected. Anterior uveitis is sometimes called iritis. Intermediate and posterior uveitis are much rarer and not covered here.

Clinical features

- **Acute anterior uveitis presents as a red eye.**
- Onset is fairly rapid (hours, not days).
- Usually with throbbing pain, often made worse by accommodation/change in lighting.
- May get excess lacrimation but no discharge should be seen.
- **Vision is normal/only mildly impaired in early stages, but in the later stages of severe disease, is associated with significant visual loss.**
- Look for other systemic inflammatory conditions: eg. inflammatory bowel disease, connective tissue disorders.
- **Consider the following differential diagnosis:**
 - Acute angle closure glaucoma (more common in older, long sighted patients)
 - Conjunctivitis (other family members affected, purulent discharge, enlarged pre-auricular nodes, no pain on accommodation)
 - Corneal abrasion/recurrent erosions
 - Microbial keratitis (associated with contact lens use)
 - Scleritis/episcleritis
 - Herpetic keratitis.
- **Examination**
 - Snellen chart acuity for each eye separately.
 - Use pinhole to correct if they have left their distance glasses at home.
 - Note patient's reaction to light of the ophthalmoscope.
 - Look for red reflex: often dull in severe disease and you may see opaque spots on cornea (keratic precipitates). Both are caused by inflammation.
 - Look for unequal pupils: affected eye usually has smaller, irregular pupil (due to posterior synechiae).
 - Look for circumcorneal injection: this suggests intraocular inflammation.
 - With fluorescein and blue/green light look for a corneal abrasion/ulcer.
- **Immediate referral warranted if:**
 - Severe corneal oedema (greatly reduced vision)
 - Hypopyon (pus in anterior chamber – look for a horizontal fluid line)
 - Fixed mid-dilated pupil (may be acute angle closure glaucoma).

Treatment

- Early ophthalmology referral indicated (our hospital usually sees them the same/next day) for first attacks or if diagnosis unclear in a patient with a history of uveitis.
- Treatment by ophthalmologist is with steroid drops and dilating drops (but remember the patient can't drive afterwards, so get someone else to take them to the clinic!).
- If referral is delayed then consider prescribing dilating drops (cyclopentolate or atropine) but **NEVER** if you are concerned this might be acute closed angle glaucoma.
- Most patients will be better within a month.
- A few develop chronic uveitis and need ophthalmology care for this.
- Natural history is unpredictable. Often recurs but interval between recurrences very variable (years in some patients).
- Remember that recurrent inflammation and steroid treatment increases the risk of early cataracts and raised intraocular pressure.

In those who have had it before...

In those with known disease, patients will often recognise their symptoms in a flare up. The BMJ review suggests in these people we should start treatment as soon as patients recognise what is happening and arrange review with an ophthalmologist the next day. *(My patients with recurrent disease are often fed up with traipsing to the eye hospital so I often negotiate with them that if the disease is mild (vision normal/only very slightly worse) they start treatment immediately on the understanding that they will contact me if they do not improve in the next couple of days, at which point they do need to go to the eye hospital – this seems to save unnecessary appointments and wastes less time for both the patient and the hospital).*

Take home messages: Acute anterior uveitis

- Presents as a red eye of fairly acute onset, with a throbbing pain made worse by accommodation or a change in lighting. Make sure this isn't acute glaucoma – if in any doubt refer immediately.
- Discharge should not be present (think of an alternative diagnosis) although you may see excess lacrimation.
- Vision is normal/only mildly impaired in early stages but if severe is associated with significant visual loss.
- Early referral indicated, although in those who have had it before and are sure of their symptoms, you can start treatment before referral (steroid drops).
- After a first episode expect recovery within one month. Warn about subsequent attacks. Be aware of the increased risk of cataracts and raised intraocular pressure with recurrent disease/treatment.

Useful websites

For patients:

The UK support group is the Uveitis Information Group and their website has lots of useful information for patients: www.uveitis.net/uig/index.php

The GP Update Course – A one day course for GPs and GP Registrars, by GPs.

We trawl through all the journals and do all the legwork to bring you up to speed on the latest issues, research and guidelines in General Practice. **We set all this in the context of the consulting room and the requirements of revalidation.** We focus on actions - getting the literature into practice and ensuring it counts towards revalidation. We make it entertaining too, without compromising the content!

Course delegates receive a copy of **The GP Update Handbook**, a 400 page book outlining the results of the most important research relevant to primary care over the last 5 years, access to **GP Update Handbook Online** from the date of booking to a year after the course. We will also give you a copy of the **GP Update Revalidation Action Pack** which contains step by step guidance on audits, reflective practice and service developments related to the course, so that you have documented evidence of improved care for your next appraisal and for revalidation. We've included lots of material for locums too.

Spring 2011 dates:

Oxford - Friday March 11
Exeter - Wednesday March 16
Southampton - Thursday March 17
London - Friday March 18
London - Saturday March 19
Edinburgh - Wednesday March 23
Leeds - Thursday March 24
Manchester - Friday March 25
Birmingham - Saturday March 26

Summer 2011 dates:

Newcastle - Wednesday May 11
Sheffield - Thursday May 12
Liverpool - Friday May 13
Birmingham - Saturday May 14
Bristol - Wednesday May 18
Cambridge - Thursday May 19
London - Friday May 20
London - Saturday May 21
London - Wednesday May 25

GPs £185, ST1, 2 & 3 and Nurses £150. For more details see www.gp-update.co.uk.

We make every effort to ensure the information in these pages is accurate and correct at the date of publication, but it is of necessity of a brief and general nature, and this should not replace your own good clinical judgement, or be regarded as a substitute for taking professional advice in appropriate circumstances. In particular check drug doses, side effects and interactions with the British National Formulary. Save insofar as any such liability cannot be excluded at law, we do not accept any liability for loss of any type caused by reliance on the information in these pages.

GP Update Limited and Primary Care Education LLP