Bristol Eye Hospital - Regional Ocular Inflammatory Service

NON-INFECTIOUS UVEITIS – INVESTIGATIONS AND MANAGEMENT

SETTING For use in the Bristol Eye Hospital Accident & Emergency/Primary Care Setting

FOR STAFF For medical and nursing staff

ANTERIOR UVEITIS

Guidance:

1. Assess both eyes fully: determine if unilateral /bilateral & check that principal component of inflammation is the anterior chamber
2. Look for ocular complications. Check intraocular pressure. Arrange an OCT scan if visual acuity reduced (if available).
3. Consider ocular phenotype (see below) & if associated systemic disease esp. spondyloarthritis (SpA). SpA may be undiagnosed in upto 40% of patients with undifferentiated AAU & diagnosis is often delayed. Follow the DUET tool for assessment (below) to help identify patients with AAU who are SpA suspects and warrant HLA-B27 testing and potential referral to rheumatology (this will be organised via the uveitis service).

   Tubulointerstitial nephritis and uveitis should be considered in patients with bilateral anterior uveitis. Check a urine dipstick (if abnormal send urine for albumin creatinine ratio) and check creatinine.

Ocular phenotype making HLA-B27 associated disease more likely:

- Unilateral, fibrin, non-granulomatous
- Moderate-severe inflammation
- Onset <40
- Associated disease/suggestive symptoms

Dublin Uveitis Evaluation Tool Guidance (DUET) – Use this criteria to identify patients requiring HLA-B27 testing and signposting based on result/symptoms

- Back pain: onset <45 and duration >3months
  OR
- Peripheral joint pains requiring GP visit

Haroon M, et al. Ann Rheum Dis 2015;74:1990–1995. doi:10.1136/annrheumdis-2014-205358

4. Consider drug induced uveitis. Patients on etanercept/ Benepali/ Embrel/ recent bisphosphonate infusion/ chemotherapy/ immunotherapy – refer to uveitis service.

MANAGEMENT NON-INFECTIOUS ANTERIOR UVEITIS

Childhood onset anterior uveitis (<16 years)

- Severe uveitis (≥3+ cells or fibrin/hypopyon) discuss with uveitis team/ on-call consultant)
- Predforte 1% 6 x a day for 1 week, 4 x a day for 1 week then reducing by one drop per week.
- Cyclopentolate 0.5% at night until review if 1+ cells or greater. Consider bilateral dilation if <5 years to prevent amblyopia. Warn parents about unequal pupils and blurred vision.

Anterior uveitis (>16 years)

- ≥1+ cells Predforte 1% - hourly 5 days, 2 hourly 1 week, 6 x a day 1 week, 4 x a day 1 week then reducing by one drop per week. Cyclopentolate 1% bd 1 week.
- 0.5+ cells Predforte 1% - hourly 2 days, 6 x a day 5 days, 4 x a day 1 week reducing by 1 drop per week. Cyclopentolate 1% bd 1 week.
- Dexamethasone 0.1% may be used as an alternative to Predforte
- Consider subconjunctival betnesol/ mydricaine (unlicensed) for severe anterior uveitis with fibrin/ hypopyon
- Add topical antihypertensive treatment for known steroid responder (e.g. Timolol, brinzolamide, Dorzolamide/ timolol)

INVESTIGATIONS AND FOLLOW UP

The follow up of investigations is the responsibility of the requesting clinician. Blood results should normally be checked by the next working day. Please discuss abnormal results with the uveitis team.

Childhood onset uveitis (<16 years)

- Investigations: Urinalysis. If abnormal check creatinine and urine albumin creatinine ratio
- Follow up: paediatric uveitis clinic 1-2 weeks. If joint pain/ swelling or systemically unwell discuss with uveitis team/ paediatrics

First or second episode acute unilateral anterior uveitis:

- DO NOT INVESTIGATE UNLESS SYSTEMIC SYMPTOMS. See DUET tool.
- Follow up -.Severe (≥3+ cells, fibrin, hypopyon) – Eye casualty 2-5 days. Pre-existing glaucoma - uveitis clinic 2 weeks. All others IOP clinic 2 weeks + uveitis telephone clinic 7-8 weeks

Recurrent (> 2 episodes) acute unilateral anterior uveitis:

- Investigations: HLA-B27 – follow DUET tool (Do not order sacroiliac x-rays) FBC, U+E, LFT, ACE, syphilis, CXR, urinalysis.
- Follow up. Severe (≥3+ cells, fibrin, hypopyon) – Eye casualty 2-5 days. Steroid responder previously investigated – IOP clinic 2 weeks + telephone clinic 7-8 weeks. Mild- moderate – uveitis clinic 7-8 weeks. Note if patient has had multiple previous episodes of uveitis which have resolved, no systemic cause found, no ocular complications and <3 episodes uveitis in the last year they may be discharged without follow up.

Chronic anterior uveitis (> 3 months of uveitis or uveitis recurs within 3 months of stopping treatment)

- Investigations: HLA-B27 – follow DUET tool (Do not order sacroiliac x-rays) FBC, U+E, LFT, ACE, syphilis, CXR, urinalysis**.**
- Follow up. Severe (≥3+ cells, fibrin, hypopyon) – Eye casualty 2-5 days. All others – uveitis clinic. Request early follow up for steroid responder.

Acute bilateral (simultaneous) anterior uveitis:

- Investigations: FBC, U&E, LFT, ACE, syphilis, CXR, urinalysis
- Follow up - uveitis clinic

INTERMEDIATE UVEITIS:

- Investigations:FBC, U&E, LFT, ACE, syphilis, CXR, urinalysis
- Imaging: OCT and Optos colours if available.
- Follow up – uveitis clinic. If cystoid macular oedema or reduced vision discuss with uveitis team/ on-call consultant

POSTERIOR/PANUVEITIS:

- Investigations - FBC, U&E, LFT, CRP, ACE, syphilis, CXR, urinalysis, toxoplasma serology if focal retinitis
- Imaging: OCT and Optos colours if available
- Follow up - Acutely unwell patient/pyrexial: blood cultures – *refer immediately to team* Discuss with uveitis team/ on-call consultant if sight threatening/ uncertainty/ infective.

SCLERITIS:

- Investigations: FBC, U&E, LFT, CRP, syphilis, ACE, urate, RhF, anti-CCP, ANA, Anti-dsDNA, ANCA, ENA, anti-cardiolipin, complement C3 & C4, immunoglobulins, IgG subclasses, CXR, urinalysis
- Imaging: Anterior segment photos if anterior, If posterior suspected: OCT & B-scan
- Follow up: discuss with uveitis team/ on-call consultant if necrotising, corneal involvement or severe. Where possible ask for uveitis team review prior to starting systemic steroids.