Posterior Uveitis: Clinical Picture and Management

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Learning Objectives
1. Knowledge of the aetiologies and systemic associations of posterior uveitis
2. Recognise the symptoms and signs of posterior uveitis
3. Discuss the investigation of posterior uveitis
4. Understand the therapeutics and management of posterior uveitis

Suggested reading

Clinical Features
May have panuveitis with anterior uveitis/spillover

MUST EXAMINE POSTERIOR SEGMENT IN ALL CASES OFiritis

Floaters
Blurred vision
Pain unusual unless also have anterior uveitis

Clinical Signs
Vitritis
Chorioretinitis
Vasculitis
Cystoid macular oedema

Causes of Posterior Uveitis
Infection
Toxoplasmosis
Toxocara
HSV
CMV
TB
Post operative endophthalmitis

Autoimmune
Masquerade: intraocular lymphoma

Toxoplasmosis
Protozoal parasite: Toxoplasma gondii
Cats are definitive hosts
Other animals (including humans) may be infected by ingesting organism
Contaminated water/food
Undercooked meat
Congenital infection

**Toxoplasmosis Signs**
- Necrotising retinitis
- Vitritis
- Pigmented scar
- +/- anterior uveitis

**Toxoplasmosis Treatment**
- Necessary if vision severely affected by vitritis, or lesion threatening macula/optic nerve
- Various antibiotic regimens with steroids
- Pyremethamine and sulphdiazine
- Cotrimoxazole
- Clindamycin
- Should not use steroids alone

**Acute Retinal Necrosis**
- HSV, HZO, CMV
- Healthy young person
- Present like acute anterior uveitis: red, painful eye with AC cells
- Vitritis and rapidly progressive retinal necrosis

**Acute Retinal Necrosis: Treatment**
- Early diagnosis and treatment vital
- IV aciclovir: 10mg/kg 8 hourly for 1 week then 6 weeks of oral treatment (800mg 5x/day).
- Barrier laser to prevent RD

**Autoimmune**
- Systemic
- Sarcoidosis
- Bechet’s
- VKH
- Ocular
- MCP/PIC
- APMPPE
- Birdshot retinochoroidopathy

**Vogt-Koyanagi-Harada Disease**
- Bilateral panuveitis
- CSF Pleocytosis
- Hearing disturbances
- Poliosis
- Vitelligo
- Headache

**MCP/PIC**
- Young myopic females
- Multiple creamy white lesions
- Visual loss due to CNVM or central lesion
- Can be associated with AZOOR
- Spectrum of severity

**Clinical Approach**
- History
- Presenting complaint
- Systemic health
Risk factors
Examination
Eye examination
General medical examination

**Special Investigations**
Further imaging of eye
Other tests depending on history and examination
Blood tests
CXR
Other (eg MRI brain, Lumbar puncture, Mantoux)

**Management**
Where possible identify and treat specific cause
Eg Syphilis: penicillin; CMV: ganciclovir
In immune mediated cases, suppression of inflammatory response usually required.
May just observe if mild or irreversible

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**Immune mediated uveitis Considerations for treatment**

Degree and location of inflammation
Prospect of reversibility
Uni vs bilateral (local Tx may be better)
General health and age
Compliance

**Corticosteroids**
Usual first line agents
Fastest to act
Safe with short-term use
Systemic, periocular, intraocular
Topical only useful for anterior segment

**Systemic Corticosteroids**
Start with moderate – large dose (0.5 – 1 mg/kg/day) then wean
Side effects include: altered mood, weight gain, thinning of skin, osteoporosis, peptic ulcers, cataract.
If on them for more than 4 – 6 weeks, natural cortisol production suppressed.

**Local Steroid Treatment**
Sub-tenons injection
Orbital floor injection
Intravitreal injection
Advantage is avoidance of systemic problems
Not so good in bilateral disease
Injection complications and higher rates of increased IOP and cataract.

**Second Line Agents**
T Cell inhibitors
Cyclosporin
Tacrolimus
Anti metabolites
Azathioprine
Methotrexate
Alkalating agents
Cyclophosphamide
Chlorambucil
Indications for second line agents
Adverse natural history (eg Behcet's)
Disease unresponsive to steroids
High doses of steroids required for extended period

Summary
Be aware of panuveitis and spillover from posterior
In all cases of uveitis a cause should be sought (but often won’t be identified)
Systematic approach to management is essential