CLINICAL GUIDELINE

Intraocular Foreign Body Management, Acute Referral Centre

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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Important Note:

The Intranet version of this document is the only version that is maintained.
Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

Intraocular Foreign Bodies Management (IOFB) in Acute Referral Centre

All cases of suspected IOFB require prompt assessment of all ocular (and any other) injuries, and establishment of an appropriate management plan.

The Following Features of History and Examination Should be Assessed

History:
- Mechanism of injury
- Details of foreign body
- Use (or non---use) of protective eye wear
- Full medical and ophthalmic history
- Tetanus status
- Time of last meal

Symptoms:
- **NB --- Patient may be asymptomatic**
- Change in VA
- Pain
- Pain on eye movement
- Photophobia
- Diplopia
- Floaters / photopsia / visual disturbance

Examination

Signs suggestive of possible IOFB – (N.B. entry site may not always be visible)

Anterior Segment
- Obvious globe rupture / penetratration ± extrusion of intraocular contents
- Reduced IOP compared to other eye
- Haemorrhage over sclera or significant chemosis along with suggestive history
- Visible FB embedded in sclera or cornea or in anterior or posterior chamber
- Seidel positive corneal wound with 2% fluorescein
- Cornea – localised oedema. If at periphery may suggest IOFB lodged in angle
- Anterior chamber – shallow / collapsed / hyphaema
- Iris – irregular pupil / visible iris defect / defect visible by retroilluminaion
- Lens – localised opacity / through and through wound / dislocation (rarely)

Posterior Segment. NB – Iris to be assessed for above abnormalities before dilatation
- Vitreous – haemorrhage
- Retina – haemorrhage / detachment
- IOFB may or may not be visible

!Do not perform scleral indentation or gonioscopy if globe rupture suspected!

Also assess for signs of infection if IOFB identified (including hypopyon, anterior chamber activity and vitreous veils), particularly if IOFB has been present for more than 6 hours

If IOFB not identified but history and examination suggestive, common “hiding places” include:
- Anterior chamber angle
- Behind iris
- Anterior vitreous / retinal
- Under retina haemorrhage

Management of Intraocular Foreign Bodies (IOFB) in Acute Referral Centre

Further Assessment

Unless IOFB is easily visible, imaging will be required:
NB --- More than 1 IOFB may be present in any suspected IOFB case
The aim of imaging is to identify the location and number of all IOFBs **CT scan – 1mm slices**
•Required in most cases of suspected IOFB
•Note: may miss small IOFBs or plasEc
B---scan Ultrasound
•In reality rarely of use as may miss small IOFBs, especially wood / vegetation. Gas / air may be mistaken for IOFB. Probably best avoided in initial assessment
•Avoid if globe obviously ruptured or AC collapsed. Do not perform if not confident examination can be performed without globe compression
Plain X---rays are poor at identifying and locating IOFBs but may be useful if CT not immediately available
MRI is contraindicated when metallic IOFB cannot be excluded

Clinical photographs should be taken if possible

Acute Management

Discuss with senior on---call / consultant in ARC for further management and theatre arrangements
If there is any significant delay in taking to theatre, consider giving intravitreal antibiotics on ward

Once globe rupture / IOFB suspected or confirmed, all cases of will require:
•Eye shield
•Admission to Ward 1C, Gartnavel General Hospital
•Preparation for theatre – nil by mouth, GA assessment
•Anti---tetanus toxoid if indicated
•Ciprofloxacin 750mg BD
•Preservative free chloramphenicol 0.5% QDS
•Consultant in charge of case should obtain consent for surgery and discuss prognosis with patient

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