



Clinical Guideline for the treatment of

ORBITAL CELLULITIS

DESCRIPTION

Orbital cellulitis is infection of the orbital tissue posterior to the orbital septum.

Types:

Preseptal

- Lid tissues in front of the septum are involved, swelling with normal vision and extra ocular motility.

Post septal Orbital Cellulitis

- Swelling and inflammation spreads posterior to the septum, vision and optic nerve compromise and extra ocular motility is impeded.

RED FLAGS

- Watch out for signs of orbital cellulitis.
- Very serious in children, can progress rapidly from preseptal to orbital cellulitis and subperiosteal abscess and optic nerve compression.

HOW TO ASSESS

HISTORY

- Preseptal and orbital cellulitis occur with higher frequency in children.
- Often occurs in association with sinusitis and upper respiratory tract infection.
- Pathogens: Gram positive cocci (Staphylococcus and Streptococcus species), Haemophilus species, anaerobes.

Preseptal Cellulitis	Orbital Cellulitis
<ul style="list-style-type: none"> • Local trauma • Infected chalazion • Dacryocystitis • URTI • Severe conjunctivitis • Recent surgery on eyelids or extraocular muscles • Endogenous seeding 	<ul style="list-style-type: none"> • Acute sinusitis - most commonly ethmoid • Posterior extension of preseptal cellulitis • Orbital trauma, foreign material • Dacryocystitis, dacryoadenitis • Dental, facial infection • Endogenous seeding

EXAMINATION

Watch out for signs of orbital cellulitis.

- Systemically unwell,
- Lid erythema and swelling,
- Extraocular motility reduced,
- Vision, colour vision reduced
- RAPD
- Disc swelling+/-choroidal folds

Very serious in children, can progress rapidly from preseptal to orbital cellulitis and subperiosteal abscess and optic nerve compression.

Differential Diagnosis:

Severe conjunctivitis, chalazion, herpetic eye disease, dacryocystitis, dacryoadenitis, allergic dermatitis, Graves' ophthalmopathy, idiopathic orbital inflammatory disease

INVESTIGATIONS

- Swab for microscopy, culture and viral PCR if discharge
- Blood culture
- FBC, ESR, CRP, LFTS, U&E
- CT orbits, Sinuses and brain

Investigations usually not necessary Orbital Cellulitis suspected:

- Blood tests: FBE, UEC, LFT, CRP
- Blood cultures if systemically unwell
- CT scan (with contrast) of orbits, paranasal sinuses, and brain