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## Orbital Cellulitis

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## **Orbital Cellulitis**

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### **CLINICAL HISTORY:**

55 year old blind lady with complaints of pain, swelling and watering of the right eye since 10 days

- Associated with fever, nausea and vomiting since 10 days
- Known case of Diabetes Mellitus since 8 years and Hypertension since 20 years on medication

### **EXAMINATION AND INVESTIGATIONS:**

Local Examination:

Right Eye:

- Swelling of the eyelid with erythematous and tender with restricted movements.
- Proptosis of the eyeball with restricted movements.
- Conjunctiva is chemosed and congested.
- Cornea-irregular surface with opacity, decemetocoele
- Pupil and Lens not visible.



Systemic Examination:

CNS, CVS and RS: Normal

Microbiology (Pus):

Gram stain:

Inflammatory Cells: Plenty in number

Organisms:

Gram positive cocci in pairs and singles.

KOH: No Fungal elements.

Plain CT On Paranasal Sinuses:

-Right periorbital and orbital cellulitis.

-Pansinusitis

-Right periorbital and orbital cellulitis.

-Pansinusitis



#### Biochemistry

Urea: Normal

Creatinine: Elevated

Sodium: Decreased

Potassium: Normal

HbA1C and RBS: Elevated.

#### Haematology:

Normocytic Normochromic Anemia with Increased Neutrophils.

#### **FINAL DIAGNOSIS:**

Right sided orbital cellulitis, corneal ulcer,

Pan ophthalmitis

Uncontrolled Diabetes with Diabetic Nephropathy

### **Treatment Given:**

Parenteral Antibiotics: Ceftriaxone and  
Metronidazole

Other Medications:

Insulin for optimal Sugar control and Antihypertensives.

Topical Application:

Atropine

Fortified Ceftazidime

In view of progressive infection leading to pan ophthalmitis, patient was subjected to  
Evisceration.

[Evisceration is surgical removal of the contents of the eyeball including the sclera].

### **DISCUSSION:**

Orbital cellulitis may result from extension of infections of the neighbouring structures like  
the paranasal sinuses(1),trauma to the eye, upper respiratory infection,

Causative organisms:

Streptococcus pneumoniae, Staphylococcus aureus, Streptococcus pyogenes.

Immediate treatment with topical and parenteral antibiotics is necessary to prevent  
complications like loss of vision, exposure keratopathy, optic neuritis, subperiosteal abscess,  
orbital abscess, cavernous sinus thrombosis, meningitis, brain abscess,(2)

Pan ophthalmitis is the intense inflammation of the whole eyeball including the Tenon's capsule necessitating evisceration. (3)

Although Orbital cellulitis is an emergency, prognosis is good if prompt treatment is given. (4)

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