



## PRESEPTAL CELLULITIS – EARLY TREATMENT WITH ANTIBIOTICS IN PEDIATRIC PATIENT

### ENT

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### ABSTRACT

Preseptal cellulitis sometimes is called periorbital cellulitis. The most common causes for its development is sinusitis and mainly affecting the pediatric population without the gender predilection. It is infection of eyelid and surrounding skin anterior to orbital septum.. We reported a case of 9 year old female with preseptal cellulitis and managed with intravenous antibiotics.

### KEYWORDS

Preseptal cellulitis, Periorbital cellulitis, Orbital cellulitis, Sinusitis

### Case Report

A 9 year female child brought by her mother in ent department as outdoor patient. The patient had pain and swelling left eye for 4 days. Initially she had common cold for 3 days. After that she developed nasal blockage, fever along with pain and swelling left eye. The swelling was insidious onset, gradually progressive and results in complete closure of left eye. She was febrile at the time of examination. Her temperature was 101°F with pulse rate 110 per minute. There was complete swelling around left eye. Her visual acuity and color vision was done by ophthalmologist and it was normal. we got her routine examination and non-contrast computer tomography of nose, paranasal sinuses, orbit. Her routine blood examination was normal. her radiological reporting was showing evidence of polypoidal mucosal thickening seen in left sphenoidal , bilateral maxillary , frontal, and ethmoidal sinuses with complete obliteration of maxillary and ethmoidal sinuses. There was evidence of extensive soft tissue opacification left ethmoidal air cells with extension into medial aspect of left orbit with displaced medial rectus inflammation. Rest of the orbital findings were normal. We admitted the patient and started intravenous amoxycylav along with orally ibrufen plus paracetamol combination and xylometazoline nasal drops 0.05% . patient showed signs of improvement after 24 hrs and complete recovery after 5 days. After that patient discharged from the hospital and follow up was done after 10 days.

### DISCUSSION

The infection anterior to orbital septum is preseptal cellulitis while infection posterior to orbital septum is orbital cellulitis. Orbital cellulitis is more dangerous than preseptal cellulitis because if it is not properly treated than lead to visual loss, intracranial complications. The most common cause for both the entities is sinusitis. The other causes are orbital trauma, dacrocystitis, dental infections. Peseptal cellulitis equally affects both the gender.the orbital cellulitis three times more common in boys than girls.<sup>1</sup> we found the pansinusitis in our case mainly affecting the left ethmoid and left sphenoid sinuses and blockage of osteomeatal complex on radiology. The disease was limited anterior to orbital septum . Williams et al<sup>2</sup> found that visual acuity and color vision was normal in the preseptal cellulitis. The case reported by us suggests the similar findings. The oral or intravenous antibiotics are sufficient for the management of preseptal cellulitis. There is no need of corticosteroids. Corticosteroids are useful in orbital cellulitis as it do not decrease the hospital stay but shorten the course of antibiotics.<sup>2</sup>

### CONCLUSION

We concluded that early diagnosis of preseptal cellulitis and its treatment with intravenous or oral antibiotics helps in the complete resolution of the disease. It helps in the prevention of further complication like orbital cellulitis or orbital abscess. Preseptal cellulitis can be managed conservatively and no need of surgery at this stage if the visual acuity and color vision is normal.

### Acknowledgment

we would like to thank the patient who had agreed to have her case reported.

### Declaration of patient consent

We certify that we have obtained all appropriate patient consent form. In the form the patient have consent for their images and other clinical information to be reported in the journal. The patients understand that their name and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

### Conflicts of interest

Nil

### REFERENCES

- 1 Santos, J. C., Pinto, S., Ferreira, S., Maia, C., Alves, S., & da Silva, V. (2019). Pediatric preseptal and orbital cellulitis: A 10-year experience. *International Journal of Pediatric Otorhinolaryngology*, 120, 82–88. <https://doi.org/10.1016/j.ijporl.2019.02.003>
- 2 Williams, K. J., & Allen, R. C. (2019). Paediatric orbital and periorbital infections. *Current Opinion in Ophthalmology*, 30(5), 349–355. <https://doi.org/10.1097/ICU.0000000000000589>