ORIGINAL RESEARCH PAPER

Ophthalmology

ORBITAL CELLULITIS WITH LOSS OF BOTH EYELIDS OF AN EYE AND ITS SURGICAL MANAGEMENT : A CASE REPORT

KEY WORDS:

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ABSTRACT

Orbitalcellulitis is inflammation of eye soft tissues behind the orbital septum. It is most commonly caused by spread of infection into the eye socket from either sinuses or blood. It may also occur after trauma . We presents you a case of extensive orbital cellulitis post infective and its management.

INTRODUCTION

Bacterial infections are amongst the most common causes of Orbital cellulitis. The usual route of spread of infection is either an ascending infection from a preexisting sinusitis involving one of the paranasal sinuses or hematogenous seeding. Other Less common causes include perorbital skin infections, direct trauma and respiratory track infections. The microbiological profile seen in orbital cellulitis commonly includes the following:

1. Staphylococcus species, particularly S. aureus, being the usual commensals on the human skin and mucosa, constitute the most commonly organism grown on the cultures from patients of orbital cellulitis. Production of a highly form of toxin by these bacteria lead to a florid inflammatory response which is characteristic of orbital cellulitis

2. Streptococcus pneumoniae is a gram-positive bacteria responsible for orbital cellulitis due to its ability to infection in the sinuses. Streptococcal bacteria invades surrounding tissues, causing the inflammatory response seen in orbital cellulitis . Streptococcal infections are detected by culture from their formation of pair or chain.

Case discussion

A 6 yr old boy came in the surgery emergency civil hospital jhajjar with 10 days history of fever and infection of left eye.His both upper lid was necrotic and later debrided by ophthalmology dept.pt left with total loss of left upper and lower eye lidwith exposed cornea. His vision was only finger counting at 1 meter distance.On ophthalomological slit lamp examination cornea was dry and opacity started at periphery.

Blood examination showed raised leucocytes count 20000, haemoglobulin level was 4gm%.Patient was managed with intravenous antibiotic, patching of cornea, bloosd transfusions. After 10 days patient was stable and ready for reconstruction of eyelids. With the help of plastic surgery department at post graduate institute of medical science reconstruction was planned. patients upper eyelid was reconstructed with forhead flap, posterior lamellae was foemed by oral mucosa graft. Lower eye lid is reconstructed with nasolabial flap with oral mucosa as posterior lamellae, shown in figer 1.

Figer 1.upper eyelid formed by forhead flap,and lower eylid by nasolabial flap.

Post op period was uneventful. Patient was discharged postop day 10.follow up for 1 month was uneventful,later we lost the contact of patient.

DISCUSSION

Orbital cellulitis might be a life threatening condition, caused by bacteria spreading from paranasal sinus through an open wound from the skin or any surrounding infection . As orbit is exposed to infections because it is adjacent to the paranasal sinuses and nasolacrimal system, and it may extend to the brain by valveless communication of facial and ophthalmic vein to the cavernous sinus .The ethmoid sinus of papyaracea bone is most commonly infected sinus leading to orbital cellulitis .Aggressive treatment is required to avoid visual loss or intracranial complications . Initially, intravenous antibiotics has to be administered, but if no improvement occurs within 48 hours, change of antibiotics, culture sensitivity and surgical debridement of the orbital tissue which are infected be considered . Anteriorly, the orbit is guarded by the orbital septum that arises from the orbital rim and attached at the tarsal plate inferiorly and levator palpebrae superioris aponeurosis superiorly. This septum guards the spread of infection to the orbital tissues. Immidiate debridement was very helpful in eliminating sourse of infection in this patient.We might not save cornea in this case but we can save his eye to go into pthysis.We can plan corneal transplant in this patient if feasible in future.

CONCLUSION

Orbital cellulitis is a life and eye threatening condition, which needs urgent diagnosis and intervention. In this reported case we could atleast give cover to sinking eye for a hope of

cornea transplant in future. Vigorous debridement ,iv antibiotics, blood transfusions helped us to take patient for reconstruction under general anaesthesia

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