


**Retrobulbar Pseudotumor as a Manifestation of Staphylococcal Pyemia**

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Staphylococcal infection leading to periorbital complication is known but is rare. Various complications including cavernous sinus thrombosis and extension to the ethmoid sinus can occur. Rapid recovery is always possible with correct diagnosis and treatment. The case presented emphasizes this point.

**Case Report**

A four-year-old girl was referred to us

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with an acute proptosis of the right eye of seven days’ duration. She also had a swelling of the left forearm. She was febrile and lethargic. The right eye was congested with chemosis, proptosis and severe periorbital edema (Fig. 1). There was a large abscess on the left forearm. Her left hemithorax was hyper-resonant with no air entry on auscultation and pneumothorax was evident on X-ray chest. Left eye examination showed that her vision was intact though ocular movements were grossly restricted. The media were clear on fundoscopy except slight retinal congestion. She was clinically diagnosed as having multiple abscesses of the forearm and orbital region and started on cloxacillin and cefotaxime. The orbital X-rays were normal. A CT scan of the orbit and skull was done with contrast enhancement which showed the retro-bulbar pseudotumor with the abscess pushing the eyeglobe forwards (Fig. 2). There was no cavernous sinus thrombosis or other intracranial extension. Oral prednisolone was started on Day 3. Meanwhile, the left hemithorax was drained by an intercostal drain and the forearm abscess was also drained. The pus grew *Staph. albus* sensitive to cloxacillin and cefotaxime. Her general condition improved dramatically and by Day 7, the chest drain was removed, the forearm wound was healing well and the proptosis had decreased considerably in size. At three months follow up, she has a normal looking right eye without any sequelae.

**Discussion**

Proptosis in children has numerous causes, some of these being glaucoma (buphthalmos), optic nerve glioma, retroorbital plexiform neurofibroma, metastatic neuroblastoma or other tumors, including tumors of the iris, choroid, retina and ciliary body(1). Similarly, paranasal sinusitis especially ethmoiditis is the most frequent source of infection causing bacterial orbital cellulitis in children under the age of ten years(2). However, inflammatory pseudotumor not affecting the eyeglobe is only sporadically reported(3). In the present case, the infection was treated before it probably would have caused cavernous sinus thrombosis or intracranial spread. Moranne *et al.*(3) reported one out of five children with proptosis and serious complications of sinusitis who responded to antistaphylococcal antibiotics. They also recommended anticoagulant and anti-cerebral edema measures to prevent extension.
via cavernous sinus and intracranial propagation of periorbital cellulitis. This was not required in our case due to probably institution of appropriate antibiotic therapy. It may be of merit in severe or late diagnosed cases. Staphylococcal colonization of nasopharynx can lead to ethmoiditis in immunocompromized or susceptible child, with rapid progress locally and hematogenous seeding as in our case. A variety of organisms other than staphylococcus can cause this infection, which is dangerous because it may be complicated by retrobulbar abscess and cavernous sinus infection and thrombosis. Treatment should be started early with intravenous antibiotics. Also, concomitant staphylococcal foci should be looked for and dealt with surgically if necessary. If in any doubt, a contrast enhanced CT or an MRI should be done as the investigation of choice to differentiate between an inflammatory lesion and a tumor.

REFERENCES

