

## **Orbital cellulitis in children: our experience.**

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### **Abstract**

*The cellulitis of the orbital region is defined by the presence of acute infectious inflammatory orbital swelling. It is a rare condition, but the high risk of serious complications requires early diagnosis and adequate treatment. We report a series of 15 patients, aged less than 15 years old collected between 2017, in whom the diagnosis of orbital cellulitis was retained on the elements of the clinic and imaging. They all benefited from radiological, biological and bacteriological explorations. The predominant etiological aspect was sinusitis. Identification of the germ was possible in 6 cases. The evolution after treatment was satisfying in all patients.*

*Keywords: cellulitis, children, orbit*

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### **I. Introduction**

Cellulites in the orbital region are defined by the presence of acute infectious inflammatory orbital swelling [1]. It is a rare condition, but the high risk of severe ocular and neurological complications requires early diagnosis and adequate treatment. We discuss the etiological, therapeutic and prognosis aspects in these children.

### **II. Materials And Methods**

We retrospectively report a series of patients, aged less than 15 years, collected at the Ophthalmology Department of the Instructional Military Hospital Mohamed V Rabat in 2017 and, in whom the diagnosis of orbital cellulitis was retained on the elements of the clinic and imaging. They were all hospitalized and benefited from radiological (CT or magnetic resonance imaging), biological (CBC) and bacteriological (local samples, hemocultures) investigations.

### **III. Results**

15 children were included in our work, the average age was 10 years, the most common clinical aspect was painful exophthalmos. Computed tomography of the orbital region confirmed the diagnosis of cellulitis in 100% of cases. The predominant etiological aspect was sinusitis. Identification of the germ was possible in five cases: Streptococcus (1cas), Staphylococcus aureus (2cas) Haemophilus influenzae, (1cas), peptoStreptococcus (1 case). All patients received a medical treatment based on parenteral antibiotics associated or no to corticosteroid therapy. 3 patients required surgical drainage, supplemented with hyperbaric oxygen therapy in two patients, which allowed healing. The evolution after treatment was satisfying in all patients.

### **IV. Discussion**

Acute orbital infections are more common in children and young adults [1,2]. The most common cause is by far the facial sinus infection. The diffusion to the orbit is then done by continuity. The most commonly found germs are streptococci, staphylococci and Haemophilus influenzae [2]. The antibacterial treatment is an intravenous emergency targeting the most common germs (streptococci, staphylococci and Haemophilus influenzae) and will be rapidly adapted to bacterial cultures and susceptibility testing. Surgical drainage is performed when the CT scan reveals a subperiosteal abscess or intraorbital abscess, especially if there is no clinical improvement or worsening after 48 hours of intravenous antibiotic therapy [1-2].

### **V. Conclusion**

The management of acute orbital conditions is a real urgency to avoid Consequences that can be quickly dramatic.

### **CONFLICT OF INTEREST**

The author declares that there is no conflict of interest.

### References

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