ACUTE ETHMOÏDITIS IN CHILDREN, A SERIES OF 22 CASES

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Aims :
The aim of our study is to review the epidemiologic, clinical, therapeutic and outcome of pediatric acute ethmoïditis

Methods:
A retrospective review was conducted of all children (younger than 18 years of age) with an acute ethmoïditis admitted to pediatric department at Fattouma Bourguiba Hospital in Monastir over a 13 year-period (from 1997 to 2009).

Results :

- Twenty-two patients with acute ethmoïditis
- They were 14 boys and 8 girls.
- The average age was 5.5 years.
- Fever was found in 11, eyelid swelling in 22, and neurological symptoms in 5 cases.
- Eyelid edema was noted on the eye examination (**Table 1**)

Table 1: Data of the eye examination

clinical signs	Number of cases	Frequency (%)
Eyelid edema	15	100
Exophthalmos	10	66.6
chemosis	5	33.3
oculomotor palsy	0	0
Decreased visual acuity	0	0
Papilledema	0	0

- On imaging studies, orbital abscesses were identified in 7 patients who were surgically managed (**Table 2**)

Table 2: imaging data

clinical form	Number of cases
preseptal form	12
retroseptal form	10
Orbital cellulitis	3
Subperiosteal abscess	7
Orbital abscess	0
Thrombophlebitis cavernous sinus	0

- All patients received systemic empirical antibiotic treatment before the identification of any responsible organismsn (**Table 3**).
- Mean duration of IV antibiotic was 12.5 days.
- Bacteriological samples of orbital drainage (5 cases) isolated :
 - ❑ streptococcus pneumoniae (3 cases)
 - ❑ haemophilus influenzae (2 cases)
- Clinical course improved in 21 cases over a follow-up of 10 months

Therapeutic modalities	Stadium ethmoiditis	Class used and the dose	Number of cases
Monotherapy	preseptal forms	Amoxicillin-clavulanic acid	2
Double antibiotherapy	preseptal form	Cefotaxime+ Fosfomycin	9
		Ceftazidime+ Fosfomycin	1
	orbital cellulitis	Cefotaxime+ Fosfomycin	3
Triple antibiotherapy	Preseptal form	-	0
	Subperiosteal abscess	Cefotaxime +Fosfomycin+ Metronidazole	4
		Cefotaxime+ Metronidazole +Amikacin	2
		Ceftazidime +Teicoplanin +Metronidazole	1

Conclusion :
In our study, contrary to literature, duration of intravenous antibiotic is much longer. Subperiosteal abscess of the orbit (SPA) can be safely managed by medical therapy alone in selected cases. The presence of SPA alone should no longer be considered as an absolute indication for surgery.