Conclusion:
Acute mastoiditis is a clinical diagnosis. The peak incidence is between 1 and 4 years, in the winter. Group A streptococcus is the most frequent organism. Most cases are treated conservatively.

Objective:
To describe the epidemiology, clinical findings and microbiology among 457 children with acute mastoiditis.


Results:
Average age was 25.8 months, with age distribution of ≤ 6 months, 7-12 months, 1-4 years, 4-10 years, >10 years with 7%, 30%,45%, 17% and 0.7% respectively.
The rate of male and female was similar (53.8%, 46.2% respectively).
The side of the affected ear was right: 51.4%, left: 48.4%.
Most cases presented in winter season (40.7%).
The presenting symptoms included: protrusion of auricle 100%, fever 63.9%, apathy 2.8%, ear symptoms (ear pain, otorrhea) 45.3%.
Fluctuation of mastoid area was found in 20.1%. Contralateral ear involvement was in 24.3%. 37% of children received antibiotics treatment prior to hospitalization.

In 83.4% there was no history of ear disease. CT or MRI was performed for 20.1% and 5% respectively.
The 3 main complications were subperiostal abscess (31.3%, n=143), epidural abscess (3.5%, n=16) and sigmoid sinus thrombosis (2.8%, n=13). 10.7% of cases underwent cortical mastoidectomy.
Culture was positive in 68.7% of cases with group A streptococcus being the most prevalent organism (27.6%). The most common antibiotic treatment was amoxicillin /clavulanic acid (96.9%). The mean hospitalization duration was 6.7 days. The recurrent rate was 5.5%.