



## IMAGES IN PAEDIATRICS

## Zigomatic mastoiditis: An atypical presentation to consider

### Cigomastoiditis: una presentación poco frecuente de mastoiditis

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The incidence of mastoiditis as a complication of otitis media has decreased considerably thanks to antibiotherapy.<sup>1</sup> As a result, atypical presentations are increasingly rare.<sup>2</sup> In children, if there is substantial pneumatization in the zygomatic process of the temporal bone, zygomatic mastoiditis may develop, with the inflammation extending toward the cheek and the temporomandibular joint and risk of development of a temporal abscess (zygomatic or Luc's abscess). This complication is extremely rare.<sup>1,3</sup>

We present the case of a girl aged 9 years with high fever, right ear pain and otorrhea and ipsilateral temporal headache. The key findings of the physical examination were tender swelling over the right zygomatic arch, trismus and retroauricular erythema. The CT scan showed right mastoiditis with subperiosteal abscess in the temporal bone

and a very small non-occlusive thrombus in the sigmoid sinus (Fig. 1). The salient laboratory finding was acute phase reactant elevation. Treatment was initiated with cefotaxime and clindamycin and achieved a favorable outcome. Saprophytic microorganisms were isolated in culture.

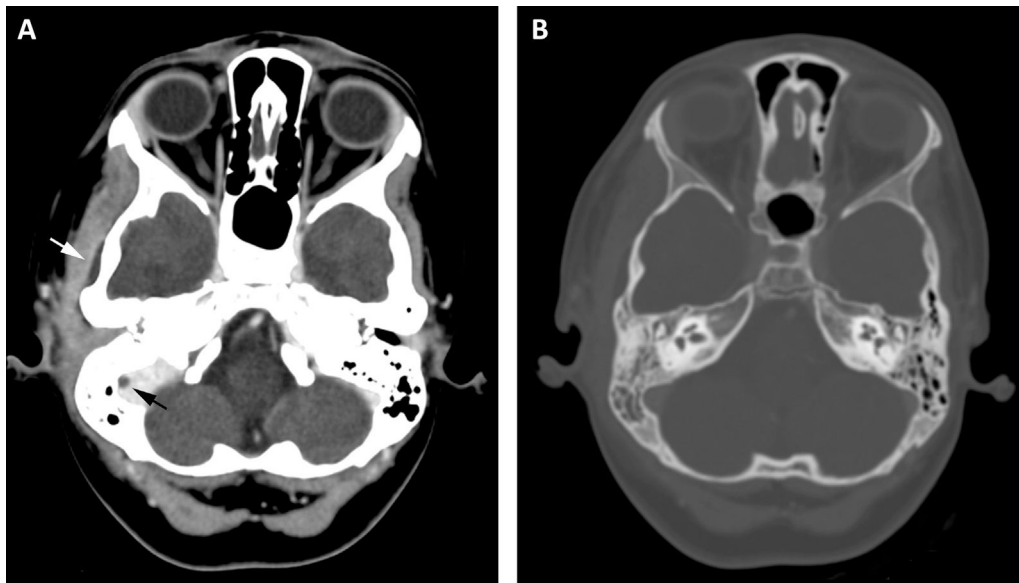
The possibility of zygomatic mastoiditis cannot be overlooked, as delayed diagnosis is associated with a risk of extension to deep tissues and complication in the form of osteomyelitis of the temporal bone. The most frequent etiological agents overlap significantly with those involved in classic forms of mastoiditis.<sup>2</sup> Parotitis should be included in differential diagnosis, and the epidemiological context, ear examination and laboratory tests may be useful to that end.<sup>1,2</sup>

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**Figure 1** Computed tomography image. (A) Soft tissue window with intravenous contrast: right mastoiditis with temporal subperiosteal abscess measuring 3.5 mm and very small non-occlusive thrombus in sigmoid sinus. Asymmetrical enlargement of soft tissues indicative of reactive myositis in temporalis muscle. (B) Axial CT image, bone window, showing otomastoid fluid buildup.

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