 IMAGES IN OTORHINOLARYNGOLOGY

Isolated Fibrous Dysplasia of the Inferior Turbinate
Displasia fibrosa aislada del cornete inferior

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We submit the case of an 11-year-old boy under treatment for acute lymphoblastic leukaemia, who presented with fever, headache and nasal congestion. Due to the persistence of the symptoms, he received a computed tomography (CT) scan of the nasal sinuses, revealing the existence of pansinusitis. Incidentally, a space-occupying bone lesion, hyperdense in the inferior turbinate, was identified (Figs. 1 and 2).

Figure 1 MDCT, reconstruction in the sagittal plane, showing a space-occupying, hyperdense lesion that affects the inferior turbinate.

Figure 2 MDCT, reconstruction in the coronal plane. The lesion in the right inferior turbinate extends to the middle nasal meatus and penetrates the maxillary sinus through its draining ostium, producing obstructive sinus disorder. Note that the lesion does not erode the adjacent bone, although it does produce remodelling in it.

Fibrous dysplasia is an idiopathic benign disorder that is most frequent in young adults. There are very few cases in the literature of dysplasia of the nasal turbinate; it is also a rare entity in children.

The skull and facial bones are affected in 10%–25% of the patients with monostotic fibrous dysplasia, but it is uncommon in the nasal fossa. The lesion is composed of fibrous tissue and bone trabeculae, lacking the normal laminar structure of the bone cortex. There is no periosteal reaction. There are three types of fibrous dysplasia: with a pattern like ground glass (56%), homogeneous dense (23%) and cystic (21%).


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The image is not pathognomonic and a differential diagnosis should be made with other lesions. Depending on lesion extension and location, the differential diagnosis should include solitary bone cyst, giant cell tumour, fibroxanthoma, enchondromatosis, eosinophilic granuloma, haemangioma, meningioma, osteoma, etc.

When there are symptoms, they are not specific; for example, pain, mass effect and pathological fractures.

Treatment depends on the age, circumstances, symptoms and suspicion of malignancy. Generally speaking, the treatment is surgical.

In this case, a thoracic-abdominal CT scan was performed to rule out polyostotic involvement. After anatomopathological examination, we decided on a conservation approach due to the patient’s base disorder, treatment for the pansinusitis and CT control.

Conflict of Interest

The authors declare no conflict of interest.