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Image Article

Sinus Mycetoma in A Child

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Abstract

We report the case of a 14-year-old child who presented a unilateral nasal obstruction associated with purulent rhinorrhea. A CT scan of the sinuses showed hyperdense formations filling the sinuses. Endoscopic surgery was used to remove the fungal balls like a tumor.

Observation

A 14-year-old patient with no particular pathological history consulted for a left nasal obstruction that had been progressively worsening for 2 years. The patient also complained of left purulent rhinorrhea associated with homolateral epistaxis.

ENT examination revealed:

1. a friable endonasal mass obstructing the left nasal cavity.
2. homolateral purulent rhinorrhea.
3. left suborbital oedema.

The lymph nodes were free. A CT scan of the sinuses revealed a mucoid filling with macrocalcifications in the left maxillary and sphenoidal sinuses (Figure 1). Immune response was normal. Biopsy of the endonasal mass showed an inflammatory polyp. The patient underwent endoscopic surgery. Endoscopy of the left nasal cavity revealed polyps which, after removal, revealed an accumulation and dense conglomeration of fungal hyphae in the left maxillary, ethmoidal and sphenoidal sinuses (Figure 2). The maxillary, ethmoidal and sphenoidal sinuses were opened wide. The post-operative period was uneventful. After 4 months' follow-up, there was no recurrence.

Learning points

The most common form of fungal rhinosinusitis is sinonasal fungus ball which usually presents in adults with normal immunity where maxillary sinus being the most involved site [1, 2]. Moreover, there is female predominance and those of older age as demonstrated in previous studies [3]. It is rare in children. Unilateral signs such as nasal obstruction, purulent rhinorrhea and facial pain are the main complaints of patients.

A CT scan of the sinuses is the imaging of choice, showing a hyperdense calcified formation within a hypodense sinus filling with osteosclerosis of the sinus walls. In our case, the conglomeration of the different calcific formations gave this pseudo tumoral appearance (Figure 2). Treatment was surgical, with removal of the fungal bullets. Functional endoscopic sinus surgery is the definitive approach for fungal ball with high success and low morbidity rates [4, 5, 6].

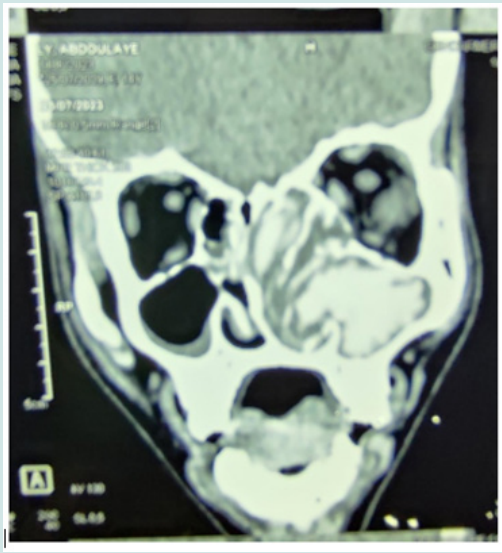

Figure 1: Macrocalcifications in the left maxillary and ethmoidal sinus.

Figure 2: Dense conglomeration of fungal hyphae.

Competing interests

None.

Patient consent

Obtained.

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