



**ORIGINAL RESEARCH PAPER**

**Paediatrics**

**THE IMPORTANCE OF RECOGNIZING THE ACUTE COMPLICATIONS OF RHINOSINUSITIS: A CASE REPORT**

**KEY WORDS:**

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**INTRODUCTION**

The difficulty in establishing an early diagnosis in the face of intracranial complications of rhinosinusitis can cause significant clinical changes and irreversible sequelae.

**Case Report**

Adolescent, 14 years old, with a report of a fall from his own height, causing a lesion in the left eyelid and evolution to periorbital cellulitis. He had severe frontal headache and two episodes of generalized tonic-clonic seizures, with subsequent brain and paranasal sinus magnetic resonance imaging that showed subdural empyema and frontal meningoencephalitis, in addition to pansinusitopathy with fluid level in the paranasal sinuses. A regimen with cefepime, vancomycin and metronidazole and a pansinusectomy was performed. In the postoperative period, he had three focal seizures with altered level of consciousness and symptoms suggestive of intracranial hypertension (headache, vomiting, and diplopia). Frontal craniotomy was performed to drain a brain abscess. He completed the antibiotic regimen for 28 days after the procedure associated with corticosteroid therapy and was discharged asymptomatic and without changes in the physical examination.

**DISCUSSION**

According to the Brazilian Guidelines, rhinosinusitis is an inflammation of the mucosa of the nose and paranasal sinuses, caused by viral, bacterial and fungal infectious processes. Its diagnosis is eminently clinical and its main complications are: diffuse orbital cellulitis, subperiosteal abscess, orbital abscess, and osteomyelitis.

Most neurological complications are associated with acute rhinosinusitis and are secondary to bacterial infections. Its mortality rate ranges from 20 to 40%, and neurological deficits range from around 25%.

Brain abscess is a serious, life-threatening complication. It is a localized area of intracerebral pus. Usually occurs after cranial trauma and surgery, secondary to a pericranial infection or disseminated via the hematogenous.

**CONCLUSION**

Brain abscess is uncommon during the course of rhinosinusitis, when it occurs it is mostly associated with pansinusitis. It is important to know how to recognize its clinical condition early in order to establish the appropriate therapeutics.

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