Introduction

There is an important relationship between allergy and acute and chronic rhinosinusitis in children. As both reflect inflammatory disorders of the upper respiratory system, it is compelling to speculate that these two illnesses share common pathophysiological mechanism and that treatment of nasal allergies would have an important benefit in the management of patients with rhinosinusitis.

Objective

The present study establishes a correlation between nasal allergy and associated paranasal sinus disease in children. We follow there parameters: the alteration of paranasal sinus mucosa recorded by imaging method, recurrent attack of acute sinusitis and chronic rhinosinusitis resistant at medical treatment at patients diagnosed by intermittent and persistent allergic rhinitis according to ARIA (allergic rhinitis and its impact in asthma).

Material and method

We include in present study 128 patients, aged between 7 and 18 years old diagnosed with allergic rhinitis. From total number of patients, 46 patients have intermittent allergic rhinitis - group I and 82 patients suffer for persistent allergic rhinitis - group II. We use clinical, laboratory and imagistic method to determining sinonasal alteration.

Results

Chronic cough and postnasal drip was the more predominant symptoms in sinusitis. In the case of group I, 34% patients suffer from different type of sinus disorders. In the case of group II, 47.5% suffer from sinusitis. The more frequent alteration demonstrated by imaging was swollen sinus mucosa with important edema - more than 5 mm - appear at 24, 2% from total number of patients. Just 17.9% of patients suffer from recurrent attack of acute sinusitis and 9.3% from total number of patients included in study have chronic rhinosinusitis resistant at medical treatment.

Conclusion

Allergic rhinitis appears to be involved as a cofactor in the disease expression of patients with both acute and chronic rhinosinusitis. In the case of group II - patients with persistent allergic rhinitis chronic sinusitis appears more frequent compare to group I. Recurrent attack of acute sinusitis appears more frequent in teenager compare to small children.