During the first, second, and third years of the follow-up period, no significant differences in the mean number of otitis media episodes were observed between the 2 groups.

CONCLUSIONS. Adenoidectomy does not increase the risk of childhood asthma or the development of allergy. Recurrent respiratory tract infections during early childhood seem to be connected to the risk of bronchial hyperreactivity. The authors also suggest that adenoidectomy is not warranted as first-line treatment for the prevention of otitis media in children <4 years of age, especially those who do not have adenoidal hyperplasia or chronic adenoid infection.

REVIEWER COMMENTS. Adenoidectomy is one of the most common surgical procedures performed for children. It is reassuring to know that it does not promote the development of asthma or atopy. However, for children who do not have adenoidal hyperplasia or chronic adenoidal infection, adenoidectomy does not reduce the number of subsequent ear infections and may be unnecessary.

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Immunopathology of Chronic Rhinosinusitis in Young Children

PURPOSE OF THE STUDY. To use immunohistopathological methods to define further the lymphocytic inflammation in pediatric chronic rhinosinusitis (CRS).

STUDY POPULATION. Nineteen children (median age: 3.0 years) with CRS corroborated by axial computed tomographic scans of the sinuses were included. Archival maxillary sinus mucosal tissue samples from 5 adults were used for comparison.

METHODS. Maxillary sinus biopsies were performed, and immunostaining was performed on tissue samples for the following: CD3, CD4, CD8, CD68, CD20, κ, λ, and CD56. Myeloperoxidase stain was used to identify neutrophils.

RESULTS. The epithelium contained significantly increased numbers of CD8+, myeloperoxidase-positive, and CD68+ cells in the pediatric CRS group, compared with the adult control subjects. There were trends toward higher numbers of CD3+ and CD4+ cells. There were insufficient epithelial tissue samples to perform staining for CD20, κ, λ, and CD56. Submucosa from pediatric CRS subjects contained significantly higher numbers of CD20+, κ+, λ+, myeloperoxidase-positive, and CD68+ cells, with a trend toward a higher number of CD4+ cells.

CONCLUSIONS. In contrast to adult subjects with CRS, for whom the inflammatory response is predominantly eosinophilic, the inflammatory response of pediatric subjects with CRS is characterized by a mixed lymphocyte population, macrophages, and neutrophils. These observations suggest 2 possibilities, that is, a different pathogenic mechanism in children with CRS or progression of the inflammatory response with protracted disease.

REVIEWER COMMENTS. This study provides basic insight into CRS in children. Additional studies need to be performed to determine whether the identified inflammatory response persists or progresses to the characteristic inflammatory response seen in adults.

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