Adenoid Hypertrophy in Adults - A Myth or Reality

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Abstract

Adenoid enlargement is uncommon in adults. Usually, enlarged adenoids are misdiagnosed in adults and accordingly maltreated. In our study, 13 cases of adenoid hypertrophy were seen between the age group of 18 to 39 years. Patients came with complaints of nasal obstruction, snoring and mouth breathing. Diagnostic nasal endoscopy showed enlarged soft tissue in the nasopharynx, probably hypertrophied adenoids. Computerised tomography was done to rule out other differential diagnosis. After surgical excision the tissue was sent for histopathological examination that confirmed our diagnosis. For complete removal transnasal endoscopes were used in assistance. Patients were regularly followed up for any recurrence. At the end of the study we came to the conclusion that instead of regressing in a natural physiological way with age, adenoids can remain in the nasopharynx, sometimes getting enlarged due to infection. We should keep enlarged adenoids as differential diagnosis in adults while dealing with a nasopharyngeal lesion.

Introduction

We are familiar with palatine tonsils and tonsillitis. There is tonsil like lymphoid tissue in the nasopharynx, which is the part of inner Waldeyer's ring. Adenoids along with tonsils help the body to fight infections. As tonsils guard against the oral infections, adenoids protect us from air borne diseases. Adenoids along with tonsils produce antibodies and provide immunity. In the natural physiological way tonsils and adenoids regress from 12 to 18 years of age. Thus adenoid hypertrophy as such is rare in adults. Children with enlarged adenoids clinically present with difficulty in breathing, repeated upper respiratory tract infection, snoring, mouth breathing, secretory otitis media, nasal speech and sometimes obstructive sleep apnoea. On examination they show the typical adenoid facies with overcrowding of teeth, broadened nasal bridge, and prominent upper lip. Adults can also present with the same symptoms except the adenoid facies. Owing to the strategic location of the adenoids, sometimes it is difficult to examine with the traditional posterior rhinoscopy mirror examination even in adults. But the advanced technologies in the form of endoscope and CT scan have helped us to diagnose and treat the difficult cases.

Methods

In our hospital we have seen enlarged adenoids in 13 adult cases. These adults came to the OPD with on and off nasal obstruction, snoring, mouth breathing. No history of epistaxis, nasal discharge or excessive sneezing. No history of blood stained nasal discharge, headache and weight loss. Out of 13, 5 patients complained of nasal obstruction and snoring, 3 complained of snoring and mouth breathing, rest of the 5 patients complained of fullness in ears, diminished hearing and nasal obstruction. On examination, external appearance of nose and anterior rhinoscopy was normal. Posterior rhinoscopy revealed a soft tissue mass in the nasopharynx in all patients. 2 patients showed hypertrophied tonsils in examination of oropharynx and no palpable cervical nodes. 5 patients showed retracted tympanic membrane and fluid in the middle ear. All the patients were subjected to diagnostic nasal endoscopy. Pinkish, lobulated mass was seen in the nasopharynx which did not bleed on probing (Fig.1). X-Ray nasopharynx lateral view for soft tissue showed a soft tissue shadow in the nasopharynx compromising the airway at the junction of the roof of the nasopharynx and the posterior wall in the midline. CT scan of paranasal sinuses and neck was done. It showed no bony erosion and no neck nodes (Fig.2). Pure tone audiometry of the patients with aural symptoms showed bilateral mild conductive hearing loss. Endoscopy assisted biopsy was taken and sent for histopathological evaluation. It revealed the diagnosis of hypertrophied lymphoid tissue.

Hence the patients were subjected to excision of the enlarged adenoids under GA. In all our subjects we used the nasal endoscopes to ensure the complete removal of the tissue so as to reduce chances of residual tissue and further recurrence [1]. All the patients were followed regularly over a period of 18 months. We didn’t get recurrence in any of the patient.

Results

All the patients did not have any postoperative complications. All the patients were satisfied with the
improvement in breathing difficulty, snoring and mouth breathing. When the patients were followed over 18 months there was no residual tissue in the nasopharynx or any recurrence.

Discussion

Anatomically adenoids are situated at the junction of roof of the nasopharynx & posterior wall of the nasopharynx. Along with the palatine tonsils, lingual tonsils, tubal tonsils & the lateral pharyngeal bands, it forms the inner Waldeyer’s ring. The function of adenoids is to protect the body from airborne infections and produce antibodies providing immunity. In the natural course, the adenoids start regressing at puberty and are not seen in adults.[2] Enlargement of adenoids can be seen from 2 years to 12 years of age after exposure to repeated infections causing nasal obstruction. In young children this obstruction gives rise to oral breathing, nasal speech, snoring, sore throat, dry mouth, overcrowding of teeth, high arched palate, broadening of the nasal bridge & Eustachian tube obstruction. This is described as typical adenoid facies. Due to Eustachian tube blockage the patient can develop secretory otitis media (glue ear). Nasal obstruction in adults can have various underlying conditions such as Deviated Nasal Septum, inferior turbinate hypertrophy, nasal polyposis, juvenile nasal angiofibroma, nasopharyngeal malignancies, and reactive hypertrophy of adenoids in HIV positive patients.

After evaluating the patient thoroughly for nasal and nasopharyngeal obstruction ruling out the other causes for the present symptomatology, we found enlargement of Luschka’s tonsil as a root cause. The patients were subjected to diagnostic nasal endoscopic examination and CT scan to rule out any erosion of bones.

The endoscopic finding was a soft lymphoid tissue at the junction of roof and posterior wall of nasopharynx. Macroscopically, it looked like a benign tumour. But tissue sampling established a positive final diagnosis of adenoids.

Even CT scan established the diagnosis as a benign non-eroding mass not very vascular. But only the biopsy showed it as hypertrophied lymphoid tissue.

There must have been large number of cases of hypertrophy of adenoids which must have been missed earlier. But nowadays with the advent of newer diagnostic modalities of nasal endoscopy and CT scans, adenoids in adults are getting diagnosed more frequently and accurately.

Reference

Illustrations

Illustration 1

DNE showing enlarged adenoid in nasopharynx
Illustration 2

saggital CT scan showing soft tissue shadow in nasopharynx
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