

ORIGINAL ARTICLE

A Clinical Study of Palatal Itching in Allergic Rhinitis

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Abstract

Background: Itching of the palate is not un-common in allergy. This is a retrospective study of one year's cases to ascertain its incidence at a clinic in Hyderabad, India. 53 cases among 100 complained of palatal itching regularly or occasionally during allergic attacks. Allergic Rhinitis, Pharyngitis, Nasopharyngitis, and Middle Ear Allergy were co-morbid. Foodstuffs, dust, pollens, and feathers were the presenting allergens. **Methods:** This retrospective study was conducted in the Government ENT Hospital, Hyderabad. In this study, we examined the Case records of patients with allergic rhinitis, Allergic Pharyngitis, Bronchial Asthma, Allergy of Middle Ear Cleft and Isolated Palatal Itching with the incidence of palatal itching for a period of one year. **Results:** A total of n=100 patients were included in the study among which n=53 cases were found with palatal itching. The age group was from 15 to 40 years of the n=53 patients n=41 was suffering from allergic rhinitis, n=6 had allergic pharyngitis, n=4 had isolated palatal itching and n=2 were the cases of aphthous ulcers. Allergography in all the n=53(100%) of the patients involved in the study showed existing food allergy which indicates it is a very common problem associated with palatal itching. Along with food allergy n=49(92.45%) cases were also having dust allergy and n=33(62.26%) cases were found to have a pollen allergy and n=1(1.88%) case was detected with feather allergy. **Conclusion:** Allergic rhinitis is commonly associated with palatal itching. The presence of food allergy was very common in patients with palatal itching. In persistent cases, Allergography followed by desensitization offers long term or permanent relief.

Keywords: Allergic Rhinitis, Palatal itching, Allergography, Desensitization, Trigger Zone

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Introduction

Allergy is a common disorder in which there is an abnormal response of the host to even a minor exposure to an antigen. Allergy is a disorder wherein harmless agents are wrongly identified as harmful and a fight put up with them resulting in injury to host tissues. Allergens enter the body through one or more of four routes: 1. Inhalation 2. Ingestion 3. Injection 4. Contact Allergy can develop to anything under the sun including sunlight and involve anyone at any age. Allergic Rhinitis is an inflammation of nasal mucosa triggered by allergens. Allergic rhinitis is a common allergic disease and it is expected to be approximately 55% of all allergies. [1] It is estimated that about 23 – 30% of the Indian population suffers from at least one of the allergic disease. [1] The incidence of allergic rhinitis ranges from 20 to

30% in India. [2] There is a recent tendency of increase in cases of allergic rhinitis in our country since the past few years. ISSAC (International study of asthma and allergies in childhood) has found that in India nasal symptoms are present in 12.5% of children aged 6-7 years and 18.6% in 13-14 years and rhinoconjunctivitis was found in 3.3% and 5.6% children. [3] The common symptoms of allergic rhinitis are congestion, rhinorrhea, itching, and sneezing and sometimes also associated with eye symptoms like redness, puffy lids, Lacrimation and itching the mouth and throat symptoms like itching of palate and pharynx and postnasal drainage is seen. [4, 5] An allergic patient may approach the doctor while being in one of its different stages. Early phase: Is due to preformed molecules like Histamine, Tryptase, Heparin, Kinases, Serotonin, etc. The early phase is remarkable by the classical triad of sneezing, watering and blocking of the nose.

Itching results in early phase mainly because of histamine. Late phase Starts after 4-6 hours and can last weeks (but usually 14 days). This phase results from the Lipoxygenase Pathway (Prostaglandins, Thromboxane, and Prostacyclin) and Cyclo-oxygenase pathway (Leukotrienes) and is manifested mainly by a blocked nose. Minimal Persistent Inflammation (MPI) Phase: Is a continuation of late phase with some blocking and hyper-reactive nasal mucosa. The Early Phase will suddenly start with a minimal challenge during MPI phase. Infection phase: Is associated with mucopurulent discharge and requires antibiotics. Remodeling phase: Results in increased goblet cells with viscid secretions, thick basement membrane, and blocked lymphatics sometimes resulting in polyp formation. With this background, we in the present study tried to evaluate the incidence of palatal itching in cases of allergic rhinitis in patients reporting to our hospital.

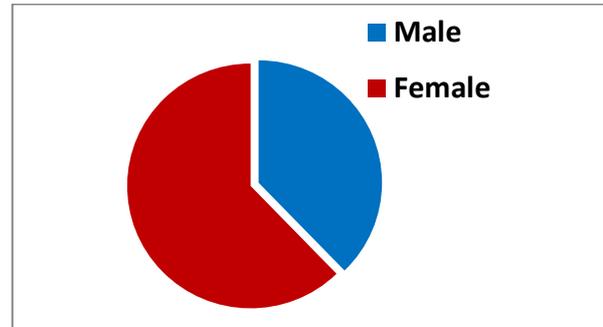
Materials and Methods

This retrospective study was conducted in the Government ENT Hospital, Hyderabad. Institutional Ethical Committee Permission was obtained for the study. In this study, we examined the Case records of patients with allergic rhinitis, Allergic Pharyngitis, Bronchial Asthma, Allergy of Middle Ear Cleft and Isolated Palatal Itching with the incidence of palatal itching for a period of one year. A total of n=100 patients were included in the study among which n=53 cases were found with palatal itching. The age group was from 15 to 40 years of the n=53 patients n=41 was suffering from allergic rhinitis, n=6 had allergic pharyngitis, n=4 had isolated palatal itching and n=2 were the cases of aphthous ulcers. N=15 cases among the Allergic Rhinitis group complained of itching behind the nose (Nasopharynx). N= 5 cases of allergic rhinitis were with Allergy of Middle Ear Cleft complained itching between the lobule of the ear and the ramus of mandible; when severe this itching extended to the external auditory meatus. Examination revealed palatal congestion (more because of rubbing with the tongue than allergy alone) in addition to the signs of the co-existent condition. Otoscopy and Tympanometry were normal in cases of itching in the ear.

Allergography revealed Dust allergy in 49 out of 53 cases. Pollens especially Parthenium, Amaranthus, Grass and various Food stuffs (all 53 cases). One case had Feather allergy.

Results

Figure 1: Sex wise distribution of cases

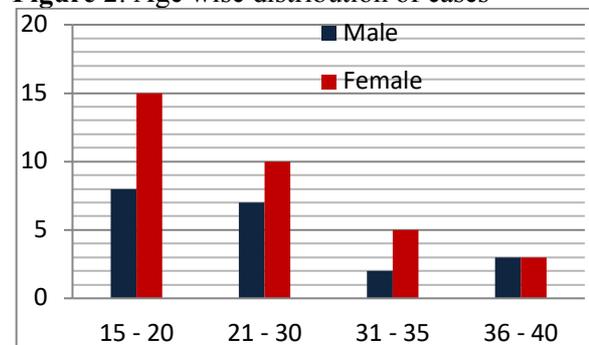


The incidence of palatal itching coexisting along other conditions were studied in n=41(77.35%) had allergic rhinitis, n= 6(11.32%) were with allergic pharyngitis, n=6(11.32%) cases with single complain of palatal itching and n=2(1.88%) cases were having palatal itching along with aphthous ulcers (table 1)

Table 1: Incidence of Palatal itching in coexisting diseases

Condition	Number of Cases	Percentage
Allergic Rhinitis	41	77.35%
Allergic Pharyngitis	6	11.32%
Single Complaint	5	9.43%
Aphthous Ulcers	1	1.88%
Total	53	100

Figure 2: Age wise distribution of cases



Allergography was done to find the allergen in all the patient's food allergy was found in all the

n=53(100%) of the patients involved in the study indicating that food allergy is a very common problem associated with palatal itching. Along with food allergy n=49(92.45%) cases were also having dust allergy and n=33(62.26%) cases were found to have a pollen allergy and n=1(1.88%) case was detected with feather allergy (table 2)

Table 2: Incidence of Allergens in cases Palatal Itching

Allergens	Number of Cases	Percentage	Prick Test
Foods	53	100%	++
Dust	49	92.45%	++
Pollens	33	62.26%	+++
Feathers	1	1.88%	+++

Discussion

There is very sparse data available regarding the presence of palatal itching in cases of allergic rhinitis. Exposure to seasonal or perennial allergens present indoor and outdoor environments is the most common one being pollens grass, trees, weeds pets, and molds. [6] Nasal allergen challenge in sensitized cases causes the release of inflammatory mediators including histamine and leukotrienes. [7, 8] Histamine has been known as the major mediator of allergic rhinitis and rhinorrhoea, however, a recent piece of evidence has also implicated cysteinyl leukotrienes are also important mediators and nasal challenges with them also cause congestion and rhinorrhoea. [9] Palatal itching in allergy cases may be referred from the nasal cavity or the presence of a Trigger Zone on the soft palate. The local erythema is similar in both cases. Nasopharyngeal itching could be due to Trigger Zone being present in the Nasopharynx itself or posterior part of the nasal cavity. It is not unusual to find patients saying that palatal itching precedes all cold attacks. [10] In many children and in some adults palatal itching at night forces them to make a peculiar palatal sound. Treating the allergic condition itself is more useful than local applications and washing. In cases of Minimal Persistent Inflammation, identifying the allergens by Allergy Test (preferably by Modified Prick Test MPT) followed by desensitization (preferably by sublingual route) has improved many cases.

Infections may demand a full course of antibiotics preferably after culture and sensitivity test. Remodeling, although said to be irreversible may be prevented from worsening by these measures.

Conclusion

Within the limitations of the present study, it can be concluded that allergic rhinitis is commonly associated with palatal itching. The presence of food allergy was very common in patients with palatal itching. In persistent cases, Allergography followed by desensitization offers long term or permanent relief.

Conflict of Interest: None declared

Source of Support: Nil

Ethical Permission: Obtained

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