

A STUDY OF SEASONAL ALLERGIC RHINITIS IN HAZARA DIVISION

Rehman Ghani, Ghulam Nabi, Saadia Ghazal

ABSTRACT:

All the cases diagnosed as allergic rhinitis in the ENT outpatient of DHQ hospital Abbottabad over a period of one year were included in a study of the pattern of seasonal allergic rhinitis in Hazara division of NWFP, Pakistan. Maximum cases out of total 56 over a year were found in March (n=20) & April (n=30). In 90% of these cases history of other associated allergies was also present while the rest of the cases did not show any such association. Out of the total 56 cases, 26 patients were females and the rest were males. Most of the patients were below 40 years of age. Pollens seem to be the major allergens in this area especially those of the poplar and pine trees.

INTRODUCTION:

The term allergy was introduced by Von Pirquet¹. Allergic Rhinitis is defined as paroxysmal sneezing, rhinorrhoea and nasal blockage with or without conjunctivitis and no signs of infection².

Our surroundings are full of allergens of different forms and types. Allergic Rhinitis and its non allergic equivalent vasomotor rhinitis, affect about 10% of the population³. They are perhaps increasing because of the industrial development. Recognition of the problem is also increasing^{4,5,6}.

Allergic rhinitis may begin at almost any age. However the greatest incidence has been found in children and young adults. The incidence of allergic rhinitis decreases with advancing age

Racial, ethnic or sexual variation has been found in its incidence. The role of heredity does not appear to be of any major significance. There are two forms of allergic rhinitis, namely seasonal and perennial. The seasonal varieties are due to airborne allergies e.g pollens, moulds, trees and grasses⁵. However, some controversy exists regarding the types of allergic rhinitis. It varies from one location to the other. The perennial type has lesser association with environmental allergens.

MATERIAL AND METHODS

All the cases coming to Out Door Department of ENT in DHQ Hospital with sneezing, watery nasal discharge, nasal blockage and irritation of the eyes for one week were included in the study.

The patients were examined and the following finding were noted:

1. Color of the nasal mucosa
2. Size of the inferior turbinates.

From Department of ENT, Ayub Medical College, Abbottabad

Rehman Ghani

Ghulam Nabi

Saadia Ghazal

3. Color of secretions from the nasal cavity.
4. Number of sneezing in one bout.
5. Eosinophil count in nasal secretion and in the blood.

Presence of at least three out of the above five points was taken as diagnostic for seasonal allergic rhinitis. The skin sensitivity test for allergic rhinitis was also done in the cases which were positively diagnosed as allergic rhinitis.

RESULTS

A total Number of 56 cases were seen in the out patient Department of DHQ Teaching Hospital, Abbottabad, during the period between 15 Jan, 1989 & 15th Jan 1990. Maximum cases were found in March & April. In 90% of these cases history of other associated allergies were also present while the rest of the cases did not show any such association.

Out of the total 56 cases, 26 patients were females and the rest were males (Table -1). Most of the patients were in age group below 40 years. Only two cases were above forty years of age (Table - 2). Most of the patients belonged to Hazara Division, mainly District Abbottabad.

Table - 1: DISTRIBUTION BY SEX

| SEX | NO. OF CASES |
|--------|--------------|
| Male | 30 |
| Female | 26 |
| Total | 56 |

Table -2 AGE WISE DISTRIBUTION

| AGE GROUP | NO. OF CASES |
|-----------|--------------|
| 0 - 10 | 02 |
| 11-20 | 18 |
| 21-30 | 25 |
| 31-40 | 08 |
| > 40 | 02 |
| Total | 56 |

Clinically, nasal discharge was the commonest symptom (85 % cases). Nasal blockage and sneezing were the other common symptoms. Some patients presented with irritation of the eyes and throat in addition to nasal discharge and sneezing (Table 3).

Table - 3, SYMPTOMS

| SYMPTOMS | NO. OF CASES |
|-----------------------------------|--------------|
| Nasal Discharge Sneezing | 43 |
| Nasal Blockage | 10 |
| Irritation of the eyes and throat | 03 |
| Total | 56 |

DISCUSSION

In our study nasal allergy was found to be slightly more common in males than in females. Adolescents and young adults were the common victims. This is in accordance with other studies³. Diagnosis was mainly clinical. Associated allergies like conjunctivitis and bronchial asthma were also found in most of the patients. Abbottabad although not an industrial city, is surrounded by hills covered with thick forests. Pollens seem to be the major allergens in this area especially those of the poplar and pine trees.

Table - 4 SEASONAL DISTRIBUTION OF CASES

| MONTH | No. of Patients | MONTH | No. of Patients |
|----------|-----------------|-----------|-----------------|
| January | 00 | July | 00 |
| February | 02 | August | 00 |
| March | 20 | September | 00 |
| April | 30 | October | 00 |
| May | 04 | November | 00 |
| June | 00 | December | 00 |

Seasonal variation revealed a marked association of AR with the pollens in Abbottabad. It is therefore, suggested that necessary measures including destruction of poplar trees, should be taken to reduce the incidence of allergies in this beautiful area. We also suggest further studies in this regard.

REFERENCES

1. K.J.Lee, M.D. Essential of Otorhynology
2. Pedersen P.A., Weeke E.R. Allergic Rhinitis in Danish General Practice. Allergy, (1981);36:375-379.
3. Farzand Ali. PAK J.Otolaryg, 1986, 2, 99-104).
4. BEG, M.H.A; Immunology and ENT, Medical Gazette, 1979, Sept 15, Oct 1, Oct 15.
5. BEG. M.H.A, Nasel allergy, Docotor, 1980, April 1:3 (Col.1).
6. PANEL DISCUSSION, National Health, 1985; Oct; 21-30)