

Clinical profile of allergic rhinitis patients in Bastar

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Abstract

Objective: To study clinical profile of allergic rhinitis patients in Bastar district. **Material and Methods:** Patients attending E.N.T. OPD of BRKM Govt. Medical College Hospital, were taken into consideration. Detailed history of all sampled patients and clinical examination were carried out and 400 cases included in this study. **Statistical Analysis:** Were expressed in terms of simple proportion. **Results:** Majority of patients belongs to third decade of life and under 30 years of age. Proportion of blockers were found much higher than sneezers and runners. In majority of cases predisposing factors were seasonal and house dust. **Conclusion:** Allergic rhinitis can affect physical, psychological, social aspect and also impact on work productivity. There is an urgent need to bring awareness drive in community about various aspect of disease including prevention.

Key Words: allergic rhinitis.

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INTRODUCTION

Allergic rhinitis is a global health problem. Burden of allergic rhinitis in India is enormous constituting about 55% of all allergies. About 20-30 % of Indian population suffer from at least one allergic disease. Prevalence of allergic rhinitis has been increasing in India over the last few decades. Basically allergic rhinitis is symptomatic disorder of nose, induced after allergen exposure by an immunoglobulin E (IgE) mediated inflammation of mucous membrane lining the nose. It is characterized by nasal congestion (blockage), rhinorrhoea (runny nose), sneezing, itching of nose and post nasal discharge. Other condition associated with allergic rhinitis are asthma, sinusitis, otitis media, nasal polyposis, lower respiratory tract infection and dental malocclusion. Risk factors of allergic rhinitis are indoor and outdoor allergens and occupational agents. Allergic rhinitis patients are often

classified as sneezers-runners and blockers because of their distinct clinical profile and need of different treatment approach. In patients who are predominantly sneezer and runner main symptoms are sneezing, anterior rhinorrhoea, itchy nose and eyes, on the other hand blockers have nasal congestion as predominant symptoms in nasal blockage and thick mucous can lead to postnasal discharge breathlessness. The ARIA group in conjunction with WHO has revised the classification of allergic rhinitis. According to new classification allergic rhinitis is divided in to intermittent and persistent group and severity can be classified as mild, moderate / severe. Intermittent means symptoms are present less than 4 days a week or less than 4 weeks. Persistent means symptoms are present more than 4 days a week and for more than 4 weeks. Mild symptoms Means that none of the following items are present—sleep disturbances, impairment of daily activities, impairment of work or school or other troublesome symptoms. When it is called moderate/severe means one of the above items are present and symptoms are constant day and night but during night may worsen. Present study is conducted with aim to identify the clinical profile of patients with allergic rhinitis and to find the association of predominant disease symptoms with common predisposing factors, type and severity of disease.

MATERIAL AND METHODS

This study was conducted in the department of Otorhinolaryngology (ENT) BRKM Govt. Medical College Jagdalpur between January 2016 to November 2016. Four hundred cases after taking proper history and clinical examination, those found to be suffering from allergic rhinitis were included in this study. Details of all sampled cases were recorded in a predrawn proforma. A detailed history was taken with special reference to sneezing, nasal blockage, itching, nasal discharge, loss of smell. Thorough clinical examination ear nose throat was carried out and presence of pale or blue nasal mucosa and hypertrophied boggy turbinate confirmed our diagnosis. An enquiry was made about history of allergens from patients but no skin allergy test carried out. Family history regarding any other allergy, socioeconomic status and occupation was also recorded. Children of less than three years were excluded in this study.

RESULTS

Table 1: Distribution of cases according to age

Sr. No.	Age in years	No. Of Cases	%
1	3-10	43	
2	11-20	45	68.25
3	21-30	185	
4	31-40	66	
5	41-50	36	31.75
6	51-onwards	25	
Total		400	100

Table 2: Case distribution of sneezers (runners) and blockers

Sr. No.	Type of allergic rhinitis	No. of Cases	%
1	Sneezer and runners	139	34.75
2	Blockers	261	65.25
Total		400	100

Table 3: Case distribution according to type and severity of allergic rhinitis

Sr. No.	Severity of symptoms	No. of Cases	%
1	Mild intermittent	64	16
2	Moderate/Severe intermittent	101	25.25
3	Mild persistent	109	27.25
4	Moderate/Severe persistent	126	31.5
Total		400	100

Table 4: Distribution of cases according to symptoms

Sr. No.	Symptoms	No. Of Cases	%
1	Nasal Obstruction	261	65.25
2	Runny Nose	122	30.5
3	Sneezing	201	50.25
4	Nasal Itching	180	45.0
5	Post Nasal Drip	61	15.25

Table 5: Distribution of cases according to predisposing factors

Sr. No.	Factors	No. of Cases	%
1	House dust	161	40.25
2	Seasonal	165	41.25
3	Cold drink	20	05.0
4	Smoke	11	02.75
5	Food	04	01.00
6	Chemicals	09	02.25
7	Cosmetics	12	03.00
8	Medicines	08	02.00
9	Wheat floor	06	01.50
10	Fruits	04	01.00
Total		400	100

Table 6: Seasonal incidence of allergic rhinitis

Sr. No	Month	No. Of Cases	%
1	January	39	09.75
2	February	18	04.50
3	March	41	10.25
4	April	30	07.50
5	May	29	07.25
6	June	22	05.50
7	July	29	07.25
8	August	23	05.75
9	September	45	11.25
10	October	61	15.25
11	November	39	09.75
12	December	24	06.00
Total		400	100

After study of collected data it has been observed that majority of patients belongs to third decade of life (46.25%). It has been observed that majority of patients are under thirty years of age (68.25%) Table-1. Proportion of blockers was found to be much higher (65.25%) than sneezers and runners (34.75%). Table-2. Severity of symptom was found to be directly proportional to duration of disease. Table-3 reveals that mild intermittent symptoms were in 16%, moderate/severe intermittent 25.25%, mild persistent 27.25%, moderate /severe persistent 31.5% in all cases. Table-4 reveals Patient complains of nasal obstruction (65.25%), sneezing (50.25%), nasal itching (45%), runny nose (30.5%), and post nasal drip (15.25). In majority of cases predisposing factors were seasonal (41.25%) and house dust (40.25%) and other factors were cold drink, smoke food, chemicals, cosmetics, medicines, wheat flour and fruits (Table-5). Table -6 reveals that maximum number of patients were in month of October (15.25%) followed by September (11.25%), March (10.25%), January (9.75%) and minimum patients were in February (4.5%).

DISCUSSION

Maximum incidence of allergic rhinitis was observed in younger age group or under 30 years of age and minimum in older age group. It may be due to immunosuppression

in old age where antibody levels and number of T cells in blood decline in considerable amount while these are much higher in younger age. The higher incidence of allergic rhinitis was much observed in males as compared to females possibly due to more exposure of males to work place allergens. Nasal obstruction, sneezing, runny nose, nasal itching, postnasal drip are diagnostic symptoms of allergic rhinitis. In this series nasal obstruction was in 65.25%, sneezing in 50.25%, runny nose in 30.5%, nasal itching in 45%, of all the cases. Almost similar symptoms distribution were reported by Clarke CH *et al* and Eccies R *et al*. Fleming and Crombie *et al* reported the maximum incidence of allergic rhinitis in younger age group or students. In this study also the incidence of allergic rhinitis was more in younger age group. In this study proportion of blocker was found more than sneezer - runner. This finding was very similar to Shah and Pawanker *et al* and Sahay *et al*. Following the recent ARIA guidelines it was observed in the present study that majority of allergic rhinitis patients has moderate/severe persistent type of disease followed by mild persistent and moderate severe intermittent types while mild intermittent type was much less common than other categories. This might be due to fact that more patients with increased severity have reported during the study period. Alyasin and Amin *et al* also reported very similar result. Number of allergen is increasing daily with modernization. Sengupta RP *et al* have observed seasonal change, house dust and industrial pollution as main predisposing factors of allergic rhinitis which is very similar to this study. In this study it was observed that 40.25% were allergic to house dust and 41.25% were more affected during the change of weather. In this study allergy with food is found in 1% of total cases and is due to food additives and preservatives.

CONCLUSION

Allergic rhinitis can affect the physical, psychological and social aspect. It has an impact on work productivity and also affect on behaviour, work performance and lifestyle of patients. Allergic rhinitis also causes hindrance at work due to repeated blowing of nose and need to rub eyes and nose. From above observation and discussion the author reached to this conclusion that an awareness drive of the community about various aspect of disease particularly various symptoms, effect of various allergens and importance of early diagnosis and avoidance of allergens or predisposing factors will be helpful in controlling the disease and improving quality of life.

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