Here; Kulit - Kenyrlis Frenzolit.

Berkala Ilmu Kedokteran Vol. 28, No. 1, Maret 1996

# Clinical features of outpatients with allergic rhinitis at E.N.T. Department, Faculty Of Medicine, Gadjah Mada University/DR. Sardjito General Hospital Yogyakarta.

Supomo-Sukardono, Bambang P., Zulkarnain H. E.N.T. Department, Faculty of Medicine, Gadjah Mada University/ DR. Sardjito General Hospital Yogyakarta.

# **ABSTRAK**

Telah diteliti gambaran klinis dari pasien rinitis alergika di Unit Penyakit THT RSUP Dr. Sardjito selama tahun 1991 meliputi insidensi, simtom klinis, manifestasi klinis yang lain, tes kulit diagnostik serta berbagai pengobatannya. Jenis pengobatan yang telah dikerjakan antara lain lalah menghindari alergen, terapi simtomatik dan desensitisasi. Yang paling sering dikerjakan yaitu terapi simtomatik dan menghindari alergen.

## **ABSTRACT**

Clinical study was conducted on allergic rhinitls in ENT Department, DR. Sardjito Hospital for one year. The study included incidence, clinical symptoms, other test, and other treatment. The treatment having been conducted included allergen, desensitization and symptomatic therapy. Symptomatic therapy and allergen avoidance were the most often done.

(Berkala Ilmu Kedokteran Vol. 28, Vol. 1: 15-18, Maret 1996)

# INTRODUCTION

Allergic rhinitis is an allergic disease in which the nose is the target organ. The clinical symptoms comprise sneezing, nasal obstruction and nasal hypersecretion with serous or seromucous discharge. Sneezing has been considered as the main symptom of allergy, it occurred at least five times in one occasion and patients experience this symptom for more than one hour a day.<sup>1</sup>

In daily practice, we often find that allergic rhinitis may occur in all age groups especially in adults, the middle age, and all socio-economical level. The morbidity rate decreases as the age increases. The hereditary factors play an important role in the onset of allergic rhinitis and other atopic diseases. The aim of this study was to find out the management and clinical features of the out patients with allergic rhinitis in ENT Department DR. Sardjito General Hospital.

# **MATERIAL AND METHOD**

This study was carried out at DR. Sardjito General Hospital from January to December 1991, in which 40 male and 58 female patients were involved. Data on allergic rhinitis among outpatients visiting Department of ENT were retrospectively collected from medical record.

Inclusion criteria for the allergic rhinitis in our ENT Department area were as follows: sneezing,

rhinorrhoe (watery), nasal obstruction, history of allergy in their family and the possible allergen. Using anterior rhinoscopy nasal cavity showed thin watery secretion (discharge), mucus and bluish white colour mucosa were shown.

### RESULT

In the period from January to December 1991, there were 40 males and 58 females who suffered from allergic rhinitis. The results of the study are shown in TABLE 1 to 8.

TABLE 1 shows that more than 95% allergic rhinitis occurred among age group of less than 40 years, with the highest percentage in 21-30 year old group (42,9%). This indicates that the disease tends to disappear after 40 years of age.

It can also be seen from this table that allergic rhinitis are more frequent in female than male patients.

Atopic history had been considered to contribute in the occurance of allergic rhinitis. However, it was found in the study that only one fifth of patients with allergic rhinitis confirmed to have family history of allergy.

TABLE 1. - Allergic rhinitis among outpatient visited Department of ENT, DR. Sardjito General Hospital in 1991.

Frequency of outpatients with allergic rhinitis	No	%
By age group		
0-20	34	34.7
21-30	42	42.9
31-40	18	18.32
41-50	3	3.06
51-60	1	1.02
>`60	0	0
By sex		
Male	40	40.8
Female	- 58	59.2
By family of allergic		
Positive	20	20.5
Negatif	78	79.5

TABLE 2 - General symptom experienced by patients with allergic rhinitis.

Symptom	Number of patient	%
Rhinorrhoe	81	82.6
Sneezing	82	83.6
Nasal Obstruction	68	69.3
Nasal Irritation	30	30.6
Throat Irritation	18	18.3

<sup>\*</sup> Some patients experienced more than one symptom.

Rhinorrhoe, sneezing and nasal obstruction were mostly found in this study as allergic rhinitis triad (TABLE 2). However, it was also found that some patients experienced more than one symptom or complaint.

Pure manifestation of allergic rhinitis was investigated in 44.9% of the patients, the others had history of asthma, urticaria, eczema (TABLE 3).

TABLE 3. - Allergic manifestation reported by patients

Allergic manifestation	No. Patient	%
Bronchial Asthma	25	25.55
Bronchial Asthma & Urticaria	6	6.1
Urticaria	20	20.4
Eczema	3	3.1
Pure Allergic Rhinitis	44	44.9
Total	98	100

No complication of allergic rhinitis was recorded in 90.8% of patients and only a few of them suffered from sinusitis. (TABLE 4).

TABLE 4. — Complications of allergic rhinits recorded from patients.

Complication	No. Patient	%
Unilateral maxillary sinusitis		_
Bilateral maxillary sinusitis	2	2.5
Ethmoidal sinusitis	5	5.2
Otitis media	2	2.5
Without complication	89	90.8
Total	98	100

House dust, human and animal dender, mite, bacteria, mould, and pollen have been identified to be the most allergen causing allergic rhinitis among patients (TABLE 5).

TABLE 5. - Results of skin test among patients with allergic rhinitis.

Allergian	Total	%
House dust	88	89.8
Human dender	83	84.7
Animal dender	63	64.4
Mite .	62	63.3
Bacteria	55	56.1
Mildew/Mould	51	52
Pollen	35	35.7
Negative		-

There were many kinds of treatment for allergic rhinitis. This study showed that avoidance was performed in all patients. Symptomatic treatment was done in 81.6% and desensitization in 53.06%.(TABLE 8).

TABLE 8. — Out Patient Allergic Rhinitis at ENT Department DR. Sardjito General Hospital in 1991. Several kinds of Treatment.

Treatment	Total	%
Preventive treatment	98	100
Symptomatic treatment	80	81.6
Desensitization	52	53.06

# DISCUSSION

A study on allergic rhinitis involving 40 males and 58 females patients was carried out.

Murdiarto<sup>2</sup> reported that allergic rhinitis in children occured more often in boys than girls.<sup>2</sup> Similar finding was also presented by Mygind.<sup>1</sup> However our finding showed that female patients suffered more often than male patients.

Considering to the age, the youngest patient was 8 year old and the oldest one was 54 year old. When the age increased, the number of allergic patients decreased, showing patients with the age over 40 year were only 3.1% (TABLE 1). This showed the same result with that of Mygind, <sup>1</sup> that in patients over the age of 40 year old this allergic rhinitis tended to be disappeared.

The percentage of patient's complaints such as rhinorrhoe, sneezing and nasal obstruction was 82.6%, 83.6% and 69.3%, respectively Rhinorrhoe and sneezing seemed to be the main complaints and then followed by nasal obstruction. (TABLE 3).

The duration of symptoms varied from 3 months up to 10 years and the average value was 4.12 years. It could be concluded that this condition possibly was due to the patient's ignorance of allergic disease or the management was not adequate.

The allergen possibly to be the most common cause of the allergic rhinitis was house dust (89.8%). Similar results were reported by Tennenbaum<sup>3</sup>, Mygind<sup>1</sup> and Murdiarto.<sup>2</sup> The other allergens were the human skin flake (83%) and animal skin flake (63%).(TABLE 7).

These allergens could be avoided by always keeping clean and keeping no animal inside the house. There were 20 patients (20.5%) who suffered from atopic allergy according to the

family history. (TABLE 4). It seemed that the atopic history played an important role in the onset of allergic diseases and there was also predisposition factor which was inherited the parents. The manifestation of disease was futher affected by environmental factors.

There were 54 patients suffered from allergic rhinitis together with other kinds of allergy such as bronchial asthma that was suffered by 25 patients (25.5%), bronchial asthma with urticaria were 6 patients (6.1%), urticaria suffered by only 20 patients (20.4%) and eczema suffered by 3 patients (3.1%) (TABLE 5).

It seemed that bronchial asthma had the highest involvement (25.5%), but there were some different opinions about the relationship between bronchial asthma and allergic rhinitis. According to Tennenbaum<sup>3</sup> 30% patients suffered from allergic rhinitis which were not treated with desensitization could produce allergic bronchial asthma. Slavin<sup>4</sup> did not agree that bronchial asthma is a complication or causes further development of the allergic rhinitis. There was an evident that the sensitivity of caudal portion of the respiratory tract increased in patients suffering from allergic rhinitis.

The frequent complications were the upper respiratory tract infection which was always recurrent and otitis media followed by nasal polyp (0.5%) as investigated by Tennenbaum<sup>3</sup> and Slavin<sup>4</sup>. In this study the complications such as maxillary sinusitis and ethmoidal sinusitis were 7.7% while according to Tennenbaum<sup>3</sup> it was only 5% (TABLE 6).<sup>3</sup>

The management of allergic rhinitis was similar the other, such as avoidance, symptomatic treatment and desensitization.

According to this study it seemed that the avoidance and symptomatic treatments were more acceptable, satisfactory and successful. (TABLE 8).

# CONCLUSION

A study on allergic rhinitis has been carried out among outpatients visiting the Department of ENT DR. Sardjito General Hospital between January and December 1991. Forty males and 58 female patients participated in the study.

The age group of 21 - 40 year old was the most frequent patients suffering from allergic rhinitis (61.22%), although the age is increased but the disease decreased. When the age reached above 50 year old the disease tended to disappear or reduce considerably.

Allergic rhinitis triad investigated was rhinorrhoe (82.6%), sneezing (83.6%) and nasal obstruction (69.3%). The duration of these symptoms varied from 3 months up to 10 years and the average was 4.12 years. Based on the facts it seemed that the management and knowledge of the patients were not adequate or sufficient to overcome it.

Atopic history of the family was found in 20.5% of the patients and it seemed that atopic played an important role in the manifestation of allergic rhinitis. The most common allergen was house dust (89.8%), followed by human skin flake and animal skin flake consecutively.

Patients who suffered from allergic rhinitis together with other form(s) of allergy at the same time, rhinitis with asthma had the greatest number of patients (25.5%). There were several different

and controversial opinions about the relationship between allergic rhinitis and bronchial asthma. Some investigators thought that bronchial asthma was a complication of the allergic rhinitis, but this opinion was refused by Slavin.<sup>4</sup>

In this study there was no complications such as otitis media and nasal polyp, but we found maxillary sinusitis or ethmoidal sinusitis as complications were found (7.7%).

The avoidance and symptomatic treatment were the most common treatment being used.

### **REFERENCES**

- Mygind N, Nasal Allergy. 1st ed. Blackwell Scientific Publication, Oxford, 1978.
- Murdiarto, Rinitis alergika pada anak. Skripsi Bagian IKA - FKUI, Jakarta, 1985.
- Tennenhaum JI, Allergic rhinitis. In: Patterson (ed) Allergic Disease. Diagnosis and Management. 2nd ed. 1972; pp. 161 - 183.
- Slavin RG, Clinical disorders of the nose and their relationship to allergy. Ann of allergy 1982; 49: 123-126.