

A Prospective Study of Clinical Profile of Patients with Chronic Urticaria

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Abstract: Both work and social life gets affected in the presence of chronic urticaria because of its relapsing course and poor response to intervention. In spite of advances in research, the etiology and the causes for the varying intensity of urticaria is still limited. To evaluate clinical profile of patients with chronic urticaria. Sixty five patients having chronic urticaria were studied symptoms at Sharma Hospital, Gwalior from January 2017 to June 2017. A detailed history regarding disease presentation, duration, presence of angioedema, systemic, precipitating and aggravating factors, history of atopic disease, dust exposure, medical history and family history of hives were recorded. Chronic urticaria was most commonly noted in female (73.8%) with mean age of 42.52±2.86 years. Mean duration of disease was 24.23 months. Maximum had duration of disease symptoms for < 1year. In 47.75% patients lesions were resolved within 30 minutes. A total 46.15% patient had delayed pressure urticaria and 33.8% had co-existent angioedema. Eosinophil count ($\geq 5\%$) was obtained in 26% of the patients. Chronic urticaria is mainly observed in middle aged women. Lesions usually resolved in less than half hour. Angioedema is often associated with the chronic urticaria. Exposure to dust can aggravate the lesions.

Keywords: Urticaria, angioedema, eosinophil count, autoimmunity.

INTRODUCTION

The incidence of urticaria ranges from 15% to 25% [1, 2]. Occurrence of daily or almost daily urticaria is termed as chronic urticaria. Several agents and factors have been reported in provoking and aggravating chronic urticaria. Of those most common are foods and food additives, infections, inhalants, contactants and autoimmunity [3].

Chronic idiopathic urticaria is the condition when provoking and aggravating factors are identified. Several guidelines based on serologic evidence have divided chronic idiopathic urticaria and call the condition chronic autoimmune urticarial [4].

Reports have shown that chronic urticaria is most common among middle aged women. Lesions vary in size; range from pin point to palm size and may be larger lesions. Individual lesions generally last for an hour and revive within a day time. Lesions are reported to be more pronounced in the evening compared to other time [4, 5].

Chronic urticaria is often accompanied with angioedema mainly in the eye lids and lips or it may also occur alone in many patients [4]. In present study we tried to evaluate the clinical profile of patients with chronic urticaria.

MATERIALS AND METHODS

Present prospective cross-sectional study was performed on 65 patients attending out patients department at Sharma Hospital, Gwalior from January 2017 to June 2017.

Patients of either sex having age between 15-60 years with clinical diagnosis of chronic urticaria were included in present study.

A detailed history regarding disease presentation, duration, presence of angioedema, systemic symptoms, precipitating and aggravating factors, history of atopic disease, dust exposure, medical history and family history of hives were recorded in preapproved proforma.

A detailed history and physical examination was performed to eliminate the focus of infection and underlying malignancies. Any patients with thyroid swelling were also recorded. Routine blood and urine investigation were also performed. Patients in whom a

cause was not identifiable after history, examination and investigations were also included in the study.

All the data analysis was performed using IBM SPSS ver. 20 software. Quantitative data was expressed as mean ± standard deviation (SD) whereas categorical data was expressed as percentage. Cross tabulation and frequency distribution was used to prepare the table and Microsoft excel 2010 was used to prepare the required graph. Level of significance was assessed at 5% level.

RESULTS

In present study out of 65 patients included maximum were females [48 (73.8%)] followed by male [17 (26.2%)]. Mean age of study cohort was 42.52±2.86 years which ranges from 15-55 years. Maximum patients were having age less than 45 years.

The duration of disease ranged from 3 months to 24 years. Most of the patients [24 (36.92%)] had disease symptoms for < 1year. Mean duration of disease in present study was 24.23 months.

In 47.7% of the patients lesions were resolved within 30 minutes whereas in 5 (7.7%) patients lesions lasted for at least 24 hours.

In present study none of the patients had family history of chronic urticaria. In 30 (46.15%) patients delayed pressure urticaria was reported. 22 (33.8%) patients had co-existent angioedema. Thirteen (20%) patients gave history of aggravation of lesions on exposure to dust. 26 patients reported history of exacerbation of lesions at night while 17 (26.15) reported the same in the evening.

Table-1: Blood Investigations

Investigation		No of patients	Percentage
Eosinophil Count	<5	38	58.5
	5-10	12	18.5
	>10	0	0
Total S. IgE (IU/ml)	<100	4	6.2
	100-320	6	9.2
	>320	5	7.7

DISCUSSION

Urticaria is one of the most common disorders with incidence of 15-25%. When urticaria occurs daily or almost daily in patients it is called as chronic urticarial [1, 2]. In present study we tried to evaluate the clinical profile of patients suffering from chronic urticarial.

Mean age of study cohort in present study was 42.52±2.86 years. Female outnumbered the male population. Though chronic urticaria can occur in any age group and to either of the sex, it has been reported to affect middle aged women. Study done by Kozelet *al.* [6], Donnelet *al.* [7], Alexander *et al.* [8], Bong *et al.* [9] and OzkayaBayazit *et al.* [10] reported the mean age of 38.0, 39.7, 42.0, 44.1 and 38.6 years respectively. Mean age in present study is little lower as compared to afore said studies.

Duration of disease in present study ranged from 3-24 months (mean duration of disease was 24.23 months) and 36.92% of the patients had duration of less than a day.

In agreement to present study Donnell *et al.* [7] has also reported that in most of the patients had disease duration of less than a year in 30% of the patients whereas study done by OzkayaBayazit [10] reported a mean duration of 41.4 month. Whereas lower disease duration was reported by study done by Alexander and [8] who observed duration of 21 month.

An older study by Champion *et al.* [5] reported that most of the patients (45%) even after the year duration had the symptoms of idiopathic urticaria.

Kozelet *al.* [6] included 220 patients and reported that urticaria alone was observed in 19%, urticaria and angioedema in 29 % and angioedema without urticaria in 8 %. In a similar study by Donnell *et al* found delayed pressure urticaria in 51.40% of their patients [11].

In present study 33.8% patients had co-existent angioedema and 20% patients gave history of aggravation of lesions on exposure to dust. Role of inhalants reported by previous studies are varied. A study by Juhlin [12] reported occurrence only in 2% of the patients whereas 53% of the cases in Juhlin’s study reported diurnal variation [12].

Eosinophil count (≥ 5 %) was obtained in 8% of Juhlin’s [12] patients whereas in present study it was 26%. An elevated IgE values in 4 % was observed in Juhlin’s study but IgE values were found to be generally normal in a group of 34 patients with acute or chronic urticaria in another study by Juhlin *et al.* [13] In our study serum IgE levels were measured in 10 patients. Two patients had values <100 IU/ml, 3 patients had values more than 320 and the rest had values in between.

However the study is small and of cross sectional in nature, large randomized clinical trial is needed to strengthen the present study findings.

CONCLUSIONS

Chronic urticaria is mainly observed in patients who were in the fourth decade of their life and in female population. In most of the patients lesions resolved in less than 30 minutes. Family history has no role in the development of chronic urticaria. Chronic urticarial is often associated with the angioedema. Exposure to dust can aggravate the lesions.

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