## Research Article

# Serum Total IgE Levels in Patients with Chronic Urticaria

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#### **Abstract**

**Introduction:** Urticaria is defined as the sudden development of transient hives (wheals) and angioedema or both. Urticaria can be classified according to the duration into acute urticaria (AU) and chronic urticaria (CU). **Aim of the work:** The aim of this work is to study the amount of total IgE in patients with chronic urticaria in correlation to patients' characteristics and clinical severity. **Patients and Methods:** This study was conducted on 100 patients with CSU diagnosed and following in dermatology clinic at Minia University, the age of patients ranged from 16 to 68 years old. **Results:** Total IgE results ranged from 5 to 350 IU/ml with mean  $\pm$  SD of 87.8 $\pm$ 72.7. **Conclusion:** elevated serum total IgE levels are not correlated with the severity.

Keywords: Chronic urticaria, Total IgE.

#### Introduction

Urticaria is defined as the sudden development of transient hives (wheals) and angioedema or both <sup>(1)</sup>. Urticaria can be classified according to the duration into acute urticaria (AU) and chronic urticaria (CU). CU is characterized by the occurrence of daily or almost daily wheals or angioedema lasting more than 6 weeks <sup>(2)</sup>. CU is classified according to the etiology into chronic spontaneous and chronic inducible urticaria <sup>(1)</sup>. Chronic spontaneous urticaria is characterized by the spontaneous occurrence of wheals and or angioedema without obvious electing factor<sup>(3)</sup>.

The cause of CSU is unknown in 50% of patients, 30% to 40% of patients have autoantibodies, suggesting an autoimmune basis. Other causes include infections, drug and food. Both type and type II hypersensitivity reactions have been associated with CSU <sup>(4)</sup>.

# **Subjects and Methods**

This study was conducted on 100 patients with CSU diagnosed and following in dermatology clinic at Minia university hospital after approval of the ethical committee of the university. Inclusion criteria, Patients with urticarial rash lasting more than 6 weeks with or without angioedema. All patients were subjected to Total serum IgE measurement.

# Statistical analysis

Data were statistically analyzed using SPSS program. Percentage (%), mean, median  $\pm$  standard deviation values were used for categorical variants. Mann Whitney test (for non-parametric quantitative data).

### Results

The present study has been conducted on 100 patients with chronic urticaria attending the outpatient clinic of Dermatology, STDs and Andrology clinic, Minia University Hospital. The age of patients ranged from 16 to 68 years with a mean  $\pm$  standard deviation (SD) of 39 $\pm$ 11.3 years. There were 77 (77 %) females and 23 (23%) males. Total IgE levels ranged from 5 to 350 IU/ml with mean  $\pm$  SD of 87.8 $\pm$ 72.7.

#### **Discussion**

Urticaria is a common dermatologic disorder characterized by the rapid appearance of wheals and/or angioedema. CU is defined as the development of spontaneous wheals lasting more than 6 weeks.<sup>(1)</sup> In 50% of adults with CU, no external cause can be identified and the final diagnosis is chronic idiopathic urticaria (CIU).<sup>(5)</sup>

In tropical countries, total serum IgE measurements have been traditionally limited because

of the high prevalence of helminthic infestations, which induce the production of increased amounts of polyclonal and parasite-specific IgE. <sup>(6)</sup>

## **Summary and Conclusion**

Total IgE level in patients with chronic urticaria may be elevated but has little clinical relevance

## References

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