

Blood Groups of Patients with Chronic Idiopathic Urticaria: A Preliminary Study

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Submitted: 12 July 2016; Accepted: 21 July 2016; Published: 28 August 2016

Abstract

Chronic idiopathic urticaria is an autoimmune skin disease characterized by spontaneously recurring hives and/or angioedema for 6 weeks or longer. Second generation H1-antihistamines are first-line treatment in patients with chronic idiopathic urticaria. In this study blood groups of patients who had chronic idiopathic urticaria and treated in dermatology department of Mersin University between January 2006 and January 2016 were reviewed retrospectively as ABO blood groups and Rh factor.

Keywords: Immunity, Blood groups, Recurrent aphthous stomatitis.

Introduction

Urticaria is a common condition that involves pruritic, elevated plaques. Although urticaria is a self-limiting condition, it may cause disappointment for patients, often because of it is a chronic and recurring disease [1]. In 1900, people were classified into four groups as A, B, AB and O depending on their RBC cell membrane contained A and/or B antigens [2,3]. The aim of this study is to determine relationship between urticaria and blood groups.

Case Study

Blood groups of patients who had urticaria and treated in dermatology department of Mersin University between January 2014 and January 2016 were reviewed retrospectively as ABO blood groups and Rh factor. The results were discussed with respect to literature.

The study group involved 100 patients of urticaria. 56 of them were female, 44 of them were male. Among 100 patients with urticaria, most common blood group detected was blood group O, found in 35 patients (35%). 31 of them had O positive and 4 of them had O negative type. Second most common blood group was blood group A and it found in 32 patients. 29 of them had A positive and 3 of them had A negative type. Blood group B was found in 22 patients, B positive in 21 patients and B negative in 1 patient. Blood group AB was found in 11 patients. AB positive in 8 patients and AB negative in 3 patients.

Discussion

Urticaria is a common disease. Although urticaria is a benign and

old disease and apparently easy to diagnose, it is still difficult to manage disease cause of its recurring [4]. Up to now many studies were performed that determine association between blood group and dermatologic diseases that have similar pathogenesis with urticaria. In a study by Parvaiz, et al. in 98 psoriasis patients O blood group was most common blood group but there was no statistically different between control group. In the same study in 76 vitiligo patients B blood group was the most common group as statistically significant [5]. In another study by Tursen et al. relationship between ABO blood group and skin cancer were investigated, but there was no statistically significant [6]. In various study it was shown that blood group O was most common group in gastric and duodenal ulcers but in a cohort study by Gustaf et al. there was found statistically significant between blood group A and gastric cancer [7-9]. In the literature there wasn't any study about relationship between blood groups and urticaria. In our patients with urticaria; O blood group was the most common group but there was no statistically significant.

Conclusion

As a result in our study we didn't find any significant association of ABO blood groups with urticaria. Further studies on blood group antigens in larger series are needed to determine the relationship between blood group antigens and urticaria.

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