

# Role of Atorvastatin in Treatment of Chronic Spontaneous Urticaria Patients: A Controlled Clinical Trial

Lobna A. El-Korashi<sup>1</sup>, Manar H. Soliman<sup>1</sup>, Enayat M. Attwa<sup>2</sup>, Nana A. Mohamed<sup>1</sup>

Departments of <sup>1</sup>Microbiology & Immunology and <sup>2</sup>Dermatology & Venereology Department, Faculty of Medicine, Zagazig University.

Chronic spontaneous urticaria (CSU) is a popular disease, affects patients' life. Its etiologic agents are not well known so; treatment of the patients is difficult. CD203c is a marker that is only present on basophils. Statins are drugs used to lower cholesterol. Nowadays, it is well known that they have immunomodulatory effects. This study evaluated the efficacy of a statin, atorvastatin, in combination with antihistamines in treating CSU patients. Forty CSU patients were divided equally into two groups. The first group was treated with antihistamines and atorvastatin, while the second group was treated with antihistamines and placebo. Both groups received the treatment for three months. The effect of treatment on total severity score (TSS), autologous serum skin test (ASST), basophil histamine release (BHR) assay, *in vivo* basophil CD203c expression (%) and basophil activation test (BAT-CD203c) was assessed. We found statistically significant reduction in TSS, BHR assay, *in vivo* basophil CD203c expression (%) ( $P= 0.000$  each), diameter of ASST and BAT-CD203c ( $P= 0.002, 0.017$ , respectively), in the patients that received the atorvastatin and antihistamines. In conclusion, atorvastatin is effective in treating CSU patients.