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Impact of heat on the activity of chronic spontaneous urticaria

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INTRODUCTION: Urticaria is an inflammatory skin disease characterized by wheals, intense pruritus and impairment of quality of life. Chronic Urticaria (CU) is classified into Chronic Spontaneous Urticaria (CSU), when there is no identifiable etiology, and Chronic Inducible Urticaria (CIndU), triggered by specific agents, such as increase in core body temperature in Cholinergic Urticaria (CholU). In CSU, environmental heat may act as a nonspecific stressor, facilitating mast cell degranulation and histamine release, promoting vasodilation and increased vascular permeability, with consequent worsening of skin lesions. Therefore, this study aims to evaluate whether there is a worsening of CSU cases upon exposure to heat and whether this aggravation may be related to the presence of underdiagnosed CholU. **METHODS:** This study consisted of a self-administered questionnaire via Google Forms, made available through a QR code at the dermatology outpatient clinic of the Faculdade de Medicina do ABC, between December 2025 and April 2026. Individuals over 18 years of age with diagnosis of CU participated. **RESULTS:** The sample consisted of 48 patients, of whom 87.5% (42) were female and 12.5% (6) were male. Among them, 45.8% (22) reported a diagnosis of CSU, and of these, 72.7% (16) perceived symptom exacerbation with heat exposure. Condition worsening occurred in 54.5% (12) of participants with CSU during sun exposure; 59% (13) during summer, and 45.4% (10) on muggy, cloudy days. Furthermore, among individuals with CSU who reported worsening with heat, 12.5% (2) did not present characteristics suggestive of CholU. **DISCUSSION:** The higher female prevalence observed is consistent with the literature, which identifies this group as the most affected by CU. The data indicate that the majority of participants with CSU reported clinical worsening with heat exposure, frequently presenting features suggestive of CholU, such as wheals smaller than 1 cm and exacerbation after hot baths or physical exercise. Considering that, according to previous studies, 30 to 40% of patients with CSU have some type of associated CIndU, these findings suggest that a possible association between both conditions may be present. **CONCLUSION:** Most patients with CSU report worsening with heat exposure. Among these patients, the majority present features suggestive of undiagnosed CholU.

KEYWORDS: Chronic urticaria; Hot temperature; Chronic inducible urticaria.