

LETTER TO THE EDITOR

Life events influence the development of ankylosing spondylitis: A case-control study

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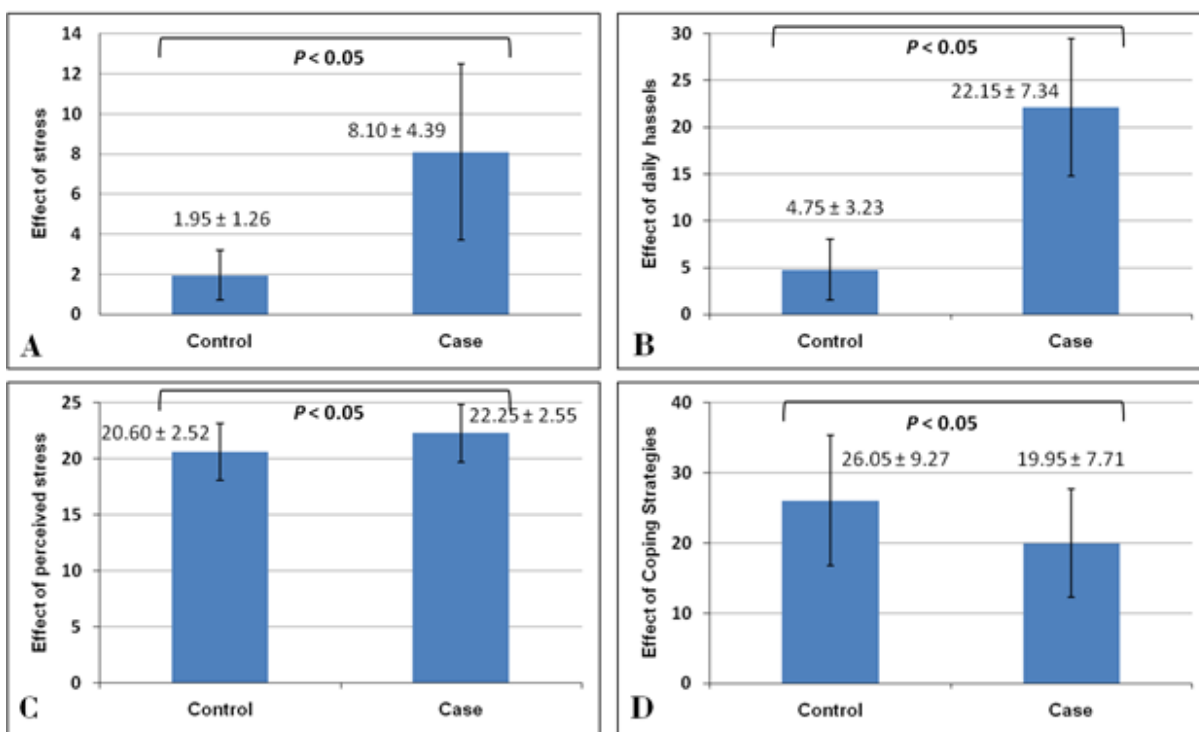
Dear Editor,

We are reporting a small pilot case-control study exploring the role of stressors of day-to-day life in triggering ankylosing spondylitis (AS) and the effect of various coping strategies adopted by the patients. We consider AS as a good model to study the hypothesis due to its close association with the well-described genetic marker, HLA B27. The onset of rheumatic diseases has been commonly observed. However, the role of stress and stressful life events in the development of rheumatic disease is a matter of debate. Though there are explainable hypothesis, clinical evidence on this association is limited.

We conducted the case-control study on 20 male HLAB 27 positive patients fulfilling the New York criteria and who had their first reportable symptoms related to AS within 5 years prior to the study.¹ Individuals from the same family who did not have the disease served as controls. The exclusion criteria considered for both cases and controls were features of other rheumatologic diseases, pre-existing psychiatric illness, and alcohol and drug abuses. To avoid the compounding effect of age, only males belonging to the age group of twenty to thirty years were selected for the study.

The controls were clinically examined for evidence of AS

Fig. 1: The unpaired T-test comparing case and controls based on: A. Effect of stress, B. Effect of daily hassles, C. Effect of perceived stress, and D. Effect of coping strategies



and those suspected were subjected to radiological study for evidence of sacroiliitis. Stress assessment for both the groups were done using daily hassles scale, life event score, and perceived stress scale, and coping strategies using coping scale.^{2, 3, 4, 5} All these scales were previously standardized and validated. The self-administered questionnaires, given both in English and regional languages, evaluated major life events dated back to 7 years. The study was approved by institutional research ethics board. All the patients were on NSAID and disease modifying drugs at the point of screening. The results of unpaired T-test comparing the case and controls indicated a significant difference in mean with regard to effect of stress, daily hassles, and coping strategies (Fig. 1). The life events and their impact by the nature of the personality were significantly different in patients with AS compared to the control group.

AS, a chronic inflammatory rheumatic disorder predominantly affecting the spine, has a substantial impact on the physical and emotional functioning and the quality of life.⁶⁻⁸ Literature evidence indicates the causal relationship between stress and onset of autoimmune diseases.⁹ Zochling *et al.* have concluded that infection and work stressors along with genetic predisposition may serve as potential triggers of AS onset.¹⁰ The current study results also states the influence of stressful and traumatic life events in the development of AS, especially in susceptible individuals.

Competing interests

The authors declare that they have no competing interests.

Disclosure

None

Citation

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