Is There an Effect of Lifestyle Changes on Psoriasis-Associated Erectile Dysfunction?

American Journal of Men's Health September-October I © The Author(s) 2022 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/15579883221128117 journals.sagepub.com/home/jmh SAGE

Ali Mohamed Ali Ismail¹

Dear editor,

Psoriasis is a chronic inflammatory skin condition that affects 0.5% to 5.5% of the world's population. With plaque psoriasis (PP) accounting for 80% of cases, PP is linked to a number of comorbid conditions, including cardiovascular diseases (van Acht et al., 2022) and erectile dysfunction (ED) (Tasliyurt et al., 2014).

Published reports recommended that adherence to lifestyle changes (proper nutrition and regular physical activity) may play an important role in the outcome of PP and PP-induced complications. Although it is unclear how lifestyle-modification strategies affect psoriasis, they are likely to have a variety of consequences. By reducing the release of proinflammatory cytokines from adipose tissue, a reduction in visceral fat mass may alleviate psoriasis. Independent of any changes in body mass index, physical activity itself creates an anti-inflammatory milieu. Diet and exercise may potentially influence immune responses by altering both transcriptional and epigenetic processes, along with the documented reductions in psoriasis-related anxiety and despair, which are both extremely common (Mahil et al., 2019).

Although there are no published studies to clarify the effect of lifestyle changes (exercise and diet intervention) on ED in psoriasis patients, the above-mentioned mechanism explaining the improvement of PP after dietary and exercise intervention is very similar to the explanation of the improvement in ED after adhering to lifestyle-modification programs (Ismail, 2022a, 2022b; Ismail & Abdelghany, 2022).

Improved psoriasis severity, cardiovascular risk factors, and inflammatory and immune profiles and negative psychological status may be suggested indicators of psoriasis-associated ED improvement after lifestyle-modification programs, but future studies are requested to support this suggestion.

ORCID iD

Ali Mohamed Ali Ismail D https://orcid.org/0000-0003-1447-8817

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¹Department of Physical Therapy for Cardiovascular/Respiratory Disorder and Geriatrics, Faculty of Physical Therapy, Cairo University, Giza, Egypt

Corresponding Author:

Ali Mohamed Ali Ismail, Lecturer, Department of Physical Therapy for Cardiovascular/Respiratory Disorder and Geriatrics, Faculty of Physical Therapy, Cairo University, Giza, Egypt. Emails: ali.mohamed@pt.cu.edu.eg; ali-mohamed@cu.edu.eg

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