The impact of mediterranean diet in psoriasis

Franklind Matthew¹, Marsha Kurniawan²

¹. General practitioner, Dr. Mintohardjo Naval Hospital, Jakarta, Indonesia
². General practitioner, Budhi Jaya Mother and Child Hospital, Jakarta, Indonesia

Abstract: Nutrition Virtual Symposium 2022 – Oral Presentation

Introduction: Psoriasis is a chronic, immune-mediated inflammatory skin disease characterized by systemic inflammation with skin, joint and metabolic involvement. Several risk factors have been recognized in the etiology and pathogenesis of psoriasis, including family history and environmental risk factors, such as diet, obesity, smoking, stress, and alcohol. Dietary patterns, such as the Mediterranean diet have been proposed to alleviate chronic inflammation. In this literature review, we aimed to thoroughly review the impact of MD in psoriasis.

Method: Relevant literature searches were conducted using reference sources such as EBSCOHOST, PROQUEST, and Google Scholar, from 2018 to 2022, with the keywords "Mediterranean diet, the role of nutrition in psoriasis, and psoriasis". The inclusion criteria for this literature review are in cohort studies, literature reviews, and cross-sectional studies that discuss: 1) current general descriptive definitions of MD, diet pyramids or numbers of servings of key components, and 2) literature investigates the efficacy of MD and potential additional therapeutic tools in the treatment of psoriasis.

Discussion: The Mediterranean diet (MD) is a healthy eating pattern characterized by high consumption of fruits, vegetables, nuts, cereals, legumes, fish, seafood, extra virgin olive oil and low intake of dairy products, meat and eggs. The MD also restricted the consumption of saturated fat products, simple carbohydrates, and highly processed food. The components of MD have anti-inflammatory, anti-oxidative, and modulating effects on the cells of the immune system that reduce the severity of psoriasis. Of all its components, extra virgin olive oil seems to play the most important role in its anti-inflammatory capacities. Two studies found that patients with higher severity of psoriasis had lower adherence to the diet. An increase in BMI was related to greater psoriasis risk onset and severity of the disease. Several studies showed a positive correlation between psoriasis severity with BMI. Hence, in patients with psoriasis, a proinflammatory diet would probably accentuate systemic inflammation and worsen the skin lesions.

Conclusion: MD has been demonstrated to have beneficial effects on psoriatic disease in various aspects by reducing systemic inflammation. Nutrition can be an additional therapeutic tool in psoriasis.
management. This underlines the need for more large-scale, randomized trials to confirm the beneficial effects of Mediterranean and more dietary patterns.

**Keywords:** psoriasis, Mediterranean diet, nutrition