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### Dietary Intervention: An Essential Part of the Management of Patients Affected by Hidradenitis Suppurativa

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#### Keywords

Acne inversa · Inflammation · Skin inflammation

Dear Editor,

We have read with great interest the article by Dempsey et al. [1] (2019) who carried out a cross-sectional survey on dietary alterations made by patients affected by hidradenitis suppurativa (HS). Their study highlights how avoidance of particular foods is a common management strategy attempted by HS patients [1].

In our opinion dietary patterns may have an important role in the management of HS, and the patients should be informed by experts about the most appropriate dietary plan for their clinical status. In line with our recent study, we suggest evaluation of individual nutritional status as an essential part in the management of HS patients [2]. In fact, in HS patients, the clinical severity (HS Sartorius score) was negatively and statistically significantly associated with both phase angle (PhA) values and adherence to the Mediterranean diet (MD) [2].

The PhA is a bioelectrical impedance analysis parameter identified as a prognostic marker of both morbidity and mortality in chronic inflammatory states [3]. The parameter is a sign of cellular integrity and of water distribution in body fluids [4, 5]. PhA values are lower in a substantial group of inflammatory diseases, including also skin conditions such as psoriasis and HS [2, 6, 7].

The MD is a well-recognized nutritional tool that affects the systemic inflammatory balance and has long-lasting hormetic effects [8]. Previous studies have already underlined its role in the multidisciplinary management of other inflammatory cutaneous diseases. In 2018, Phan et al. [9] demonstrated how this dietary regimen can slow the progression of psoriasis, and it is advisable in pregnant women as it potentially decreases the risk of atopy in their offspring [10]. Compared to the control group, HS patients showed different dietary habits tending to a pro-inflammatory status characterized by a lower intake of complex

carbohydrate, monounsaturated fatty acids, and n–3 polyunsaturated fatty acids, and a higher consumption of saturated fatty acid and n–6 polyunsaturated fatty acids [2]. Moreover, low adherers to the MD had a statistically significantly higher score in the HS Sartorius scale [2].

In addition, it has been previously shown that HS patients have a significantly higher prevalence of insulin resistance. We recently analysed homoeostasis model assessment of insulin resistance (HOMA-IR) in HS patients and healthy subjects with patients having higher values ( $p = 0.023$ ). Moreover, we assessed the rate of glucose and insulin secretion after the oral glucose tolerance test. HS patients showed a significant difference regarding the insulin but not the glucose rate with respect to healthy subjects. HS subjects affected by insulin resistance showed a correlation with disease severity as well as with the glucose rate and BMI [11].

Therefore, dermatologists and nutritionists should have a multidisciplinary approach in HS patients in order to inform them about the appropriate diet plan, guiding their dietary habits and promoting a higher intake of foods with anti-inflammatory effects as in the MD.

In conclusion, in agreement with the study of Dempsey et al. [1], we underline once again the role of dietary patterns in the management of HS patients, focusing in particular on bioelectrical impedance analysis parameters (PhA) and MD diet adherence as a potential tool in the therapeutic intervention and prognostic evaluation of HS.

#### Key Message

Dietary patterns, Mediterranean diet adherence, and evaluation of bioelectrical impedance analysis parameters are central in hidradenitis suppurativa management.

#### Disclosure Statement

None of the contributing authors have any conflict of interest, including specific financial interests of relationships and affiliation, relevant to the subject matter or discussed materials in this paper.

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