

Should dermatologists care about hepatic fibrosis and steatosis? Psoriasis first, hidradenitis suppurativa second

Enzo Emanuele¹, Piercarlo Minoretti²

¹2E Science, Via Monte Grappa, 13, I-27038 Robbio (PV), Italy; ²Studio Minoretti, Oggiono (LC), Italy

Dear Editor,

The research conducted by Hanci et al.^[1] has captured our attention due to its detailed exploration of the prevalence of hepatic fibrosis and steatosis in patients suffering from psoriasis, utilizing vibration-controlled transient elastography (VCTE). Following a meticulous examination of 328 patients, the authors shared important findings about the prevalence of severe fibrosis (7.0%) and cirrhosis (10.1%), discerned through liver stiffness measurement values. Furthermore, they discovered a substantial segment of psoriatic patients (43.3%) with severe hepatic steatosis, denoted by a controlled attenuation parameter value exceeding 290 dB/m.^[1] The authors merit commendation for highlighting the critical need for screening a specific dermatological patient population for non-alcoholic fatty liver disease (NAFLD) and its potential complications. Patients with psoriasis are indeed known to form a particularly significant group, as they not only face an augmented risk of developing NAFLD but also tend to suffer from more severe disease compared to non-psoriatic individuals with NAFLD.^[2] In addition to psoriasis, we propose that subjects suffering from hidradenitis suppurativa (HS) – a chronic inflammatory/autoinflammatory skin condition predominantly impacting the apocrine gland-rich areas of the body and presenting with abscesses, painful nodules, and scarring^[3] – could also benefit from undergoing routine VCTE. In a cohort of 83 patients with HS, Damiani et al.^[4] detected NAFLD and non-alcoholic steatohepatitis (NASH) in 20 (24.1%) and 12 (14.4%) cases, respectively. In a Spanish study involving 70 patients affected by HS, the prevalence of NAFLD reached a striking 72.9%, with the presence of the disease being independent of classic metabolic risk factors.^[5] González-Villanueva et al.^[6] later corroborated an independent association between HS and NAFLD (odds ratio [OR]=2.79) after adjustment for age, body mass index, hypertension, and increased liver enzymes. In a recent meta-analysis, Gau et al.^[7] confirmed that HS is associated with NAFLD (OR=1.78) and

hepatitis B (OR=1.48), but not hepatitis C. While a number of studies utilizing VCTE have demonstrated its potential benefits for psoriatic patients,^[8] the application of this imaging technique in the field of HS is still in the early stages of exploration.^[5] This may be due to the rarity of this skin disorder, estimated to affect only 0.7–1.2% of the European-US population.^[3] However, international registries have been set up^[9] and collaborative efforts among researchers are urgently needed to thoroughly explore the clinical benefits of using VCTE in this patient group. We propose that, moving forward, there should be a study of a stepwise approach^[10] for the detection of hepatic fibrosis in HS. This process would commence with the application of straightforward, non-invasive tests (NITs) derived from standard clinical and laboratory data. Should patients be categorized as high or intermediate risk for advanced fibrosis after NITs calculation, they would subsequently undergo second-tier VCTE examinations. We anticipate that this method could significantly alleviate the burden of NAFLD in HS patients, who are already grappling with substantial personal health challenges.

Peer-review: Externally peer-reviewed.

Author Contributions: Concept – EE; Design – EE; Supervision – EE; Fundings – PM; Materials – EE, PM; Data Collection and/or Processing – EE, PM; Analysis and/or Interpretation – EE, PM; Literature Search – EE; Writing – EE; Critical Reviews – PM.

Conflict of Interest: The authors have no conflict of interest to declare.

Financial Disclosure: The authors declared that this study has received no financial support.

References

- Hanci B, Aksoy AN, Baskent MF, Umutlu EG, Yalcin MO, Emanet SU, et al. Vibration-controlled transient elastography for noninvasive screening of liver fibrosis and steatosis in Turkish patients with psoriasis: a cross-sectional study. *Hepatol Forum* 2023. [Epub ahead of print]. doi: 10.14744/hf.2023.2023.0017
- Klujso EH, Parcheta P, Witkowska AB, Krecisz B. Non-alcoholic fatty liver disease in patients with psoriasis: therapeutic implications. *Postepy Dermatol Alergol* 2020;37(4):468-474.
- Nguyen TV, Damiani G, Orenstein LAV, Hamzavi I, Jemec GB. Hidradenitis suppurativa: an update on epidemiology, phenotypes, diagnosis, pathogenesis, comorbidities and quality of life. *J Eur Acad Dermatol Venereol* 2021;35(1):50-61.
- Damiani G, Leone S, Fajgenbaum K, Bragazzi NL, Pacifico A, Conic RR, et al. Nonalcoholic fatty liver disease prevalence in an Italian cohort of patients with hidradenitis suppurativa: A multi-center retrospective analysis. *World J Hepatol* 2019;11(4):391-401.
- Durán-Vian C, Arias-Loste MT, Hernández JL, Fernández V, González M, Iruzubieta P, et al. High prevalence of non-alcoholic fatty liver disease

How to cite this article: Emanuele E, Minoretti P. Should dermatologists care about hepatic fibrosis and steatosis? Psoriasis first, hidradenitis suppurativa second. *Hepatology Forum* 2023; 4(3):150–151.

Received: July 03, 2023; **Accepted:** July 11, 2023; **Available online:** September 20, 2023

Corresponding author: Enzo Emanuele; Scientific Directorate, 2E Science, Via Monte Grappa, 13, I-27038 Robbio (PV), Italy
Phone: +39 3385054463; **e-mail:** enzo.emanuele@2escience.com



OPEN ACCESS
This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License.

Hepatology Forum - Available online at www.hepatologyforum.org



- among hidradenitis suppurativa patients independent of classic metabolic risk factors. *J Eur Acad Dermatol Venereol* 2019;33(11):2131-2136.
6. Villanueva GI, DeGracia C, Planells M, Poveda I, Álvarez P, Schneller-Pavalescu L, et al. Hidradenitis Suppurativa is Associated with Non-alcoholic Fatty Liver Disease: A Cross-sectional Study. *Acta Derm Venereol* 2020;100(15):adv00239.
 7. Gau SY, Hsiao YP, Liao WC, Ma KS, Wu MC. Risk of liver dysfunction and non-alcoholic fatty liver diseases in people with hidradenitis suppurativa: A systematic review and meta-analysis of real-world evidences. *Front Immunol* 2022;13:959691.
 8. Marsh RL, Kelly S, Mumtaz K, Kaffenberger J. Utility and limitations of transient elastography to monitor hepatic steatosis, hepatic fibrosis, and methotrexate-associated hepatic disease in psoriasis: a systematic review. *J Clin Aesthet Dermatol* 2021;14(12):24-28.
 9. Daxhelet M, Daoud M, Suppa M, Benhadou F, Njimi H, Tzellos T, et al. European registry for hidradenitis suppurativa: state of play. *J Eur Acad Dermatol Venereol* 2021;35(4):e274-e276.
 10. Yilmaz Y. Letter: a stepwise approach towards the screening of hepatic fibrosis in the general population. *Aliment Pharmacol Ther* 2020;51(6):669-670.