

Correspondence

Anti-*Saccharomyces cerevisiae* antibodies could reflect distinct phenotypes in hidradenitis suppurativa

To the Editor:

In their recent publication Assan et al¹ have shown that both IgG and IgA anti-*Saccharomyces cerevisiae* antibodies (ASCAs) are associated with hidradenitis suppurativa (HS).¹ As the authors state, ASCA positivity has long been associated with Crohn disease and has recently been identified as a biomarker for spondyloarthritis (SpA). However, both Crohn disease and SpA comprise distinct phenotypes. The phenotype in Crohn disease can change from an inflammatory phenotype, to a fibrostenotic or penetrating phenotype with respectively severe stricturing or fistulation.² SpA is a group of diseases that can be subdivided into axial and peripheral SpA on the basis of the most prominently involved joints. In both Crohn disease and SpA, ASCA positivity has been shown to differ between the phenotypes. In patients with Crohn disease, the presence of ASCAs is mostly associated with the fibrostenotic/penetrating phenotype, disease in the ileocolonic region, and early disease onset.² In patients with SpA, ASCA positivity is associated with the absence of axial involvement and a history of uveitis or arthritis. This suggests that ASCAs are associated with specific phenotypes within these diseases, not just disease severity. Therefore, ASCA positivity could potentially reflect a specific phenotype or a group of phenotypes within the general HS population rather than just disease severity.

Moreover, the prevalence and diagnostic value of ASCAs among the population with inflammatory bowel disease has shown significant variation among patients with different ethnic backgrounds. As such, ASCA positivity has been shown to be less prevalent and less sensitive in Japanese and Chinese populations compared with white populations.² It would be of interest to know the associations between different ethnic backgrounds in the study by Assan et al because white HS populations tend to show a different distribution of patient characteristics/phenotypes compared with Asian populations. Moreover, future studies evaluating the presence and associations of ANCA positivity in Asian HS populations could potentially help increase our understanding of the different HS phenotypes.

To assess the potential association between the most common mutations found in HS, namely mutations in the gamma-secretase unit, and ASCA positivity, the authors performed a subgroup analysis. This analysis revealed, apart from a novel nicastrin mutation in a familial case, no mutations among this group and no association was found. In Crohn disease, ASCA positivity has been associated with a greater frequency of mutant NOD2/CARD15 alleles.² Mutations in NOD2/CARD15 have also been found to be more frequent in patients with SpA and histological evidence of subclinical intestinal inflammation compared with patients with SpA without gut inflammation.³ This suggests there might be a role for these mutations in specific subpopulations of patients (phenotypes) not only in SpA but also in HS. Although mutations in NOD2/CARD15 could not be found in a small case series of 6 “at-risk” patients with HS, it would be valuable to assess the presence of NOD2/CARD15 mutations in patients with HS with respect to ASCA positivity.

In conclusion, ASCA positivity might not just be associated with HS but could potentially reflect a specific clinical phenotype and/or genotype within the general HS population.

Kelsey R. van Straalen, MD

From the Department of Dermatology, Erasmus University Medical Center, Rotterdam, The Netherlands. E-mail: k.vanstraalen@erasmusmc.nl.

Disclosure of potential conflict of interest: The author declares no relevant conflicts of interest.

REFERENCES

1. Assan F, Gottlieb J, Tubach F, Lebbah S, Guigue N, Hickman G, et al. Anti-*Saccharomyces cerevisiae* IgG and IgA antibodies are associated with systemic inflammation and advanced disease in hidradenitis suppurativa [published online ahead of print February 13, 2020]. *J Allergy Clin Immunol* <https://doi.org/10.1016/j.jaci.2020.01.045>.
2. Bonneau J, Dumestre-Perard C, Rinaudo-Gaujous M, Genin C, Sparrow M, Roblin X, et al. Systematic review: new serological markers (anti-glycan, anti-GP2, anti-GM-CSF Ab) in the prediction of IBD patient outcomes. *Autoimmun Rev* 2015;14:231-45.
3. Laukens D, Peeters H, Marichal D, Vander Cruyssen B, Mielants H, Elewaut D, et al. CARD15 gene polymorphisms in patients with spondyloarthropathies identify a specific phenotype previously related to Crohn's disease. *Ann Rheum Dis* 2005; 64:930-5.

<https://doi.org/10.1016/j.jaci.2020.04.017>