Reply to: “Evaluation of the histological scoring systems of autoimmune hepatitis: a significant step towards the optimization of clinical diagnosis”

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List of abbreviations: AIH: autoimmune hepatitis, IAIHG: International Autoimmune Hepatitis Group, IAHPG: International Autoimmune Hepatitis Pathology Group

Author contributions

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Dear Editor,

We would like to thank Dr. Atsumasa Komori for his interest in our study entitled “Comparison of four histological scoring systems for autoimmune hepatitis (AIH) to improve diagnostic sensitivity”, and for the kind comments (1, 2).

As highlighted in the editorial, the histopathological diagnosis of AIH poses challenges. This is especially so in cases of acute presentation, because the classical features of AIH (dense lymphoplasmacytic portal infiltrates with moderate/severe interface hepatitis) are not always seen in such cases. Moreover, the degree of lobular necroinflammation may significantly outweigh that of interface hepatitis or portal lymphoplasmacytic infiltration, potentially leading to a completely different histopathological interpretation. In our study, combining the simplified International AIH Group scoring system (“2008 IAIHG”) with the newly proposed histological scoring systems either by Balitzer et al.(3) (“2017 UCSF”) or by the International AIH Pathology Group (“2022 IAHPG”)(4) enhanced the sensitivity in diagnosing AIH compared to using the 2008 IAIHG alone. Similar results were observed in the subgroup analysis of AIH cases with acute presentation. Thus, unlike the 2008 IAIHG criteria, where histological scores are assigned only if there is evidence of interface hepatitis, emperipolesis, and hepatocytic rosettes (“typical”), or at least a chronic hepatitis picture with lymphocytic infiltration (“compatible”), the 2017 UCSF and 2022 IAHPG systems encompass cases with lobular hepatitis patterns that are more frequently observed in AIH with acute presentation. However, it is noteworthy that although the presence of interface hepatitis and portal lymphoplasmacytic infiltration is not mandatory for diagnosing AIH according to the two recent systems, there is still a component of at least mild interface hepatitis in the lobular hepatitis-predominant acute AIH cases. Indeed, all cases in our
study demonstrated at least a mild degree of interface hepatitis, including those with acute hepatitis patterns.

We would also like to highlight another diagnostic conundrum, which is the differentiation between AIH and drug-induced liver injury with AIH-like features (DI-AIH)(5, 6). The histological differences between AIH and DI-AIH remain poorly characterized. Recently, Alkashash et al. compared nine cases of AIH and six cases of DI-AIH and found a higher degree of portal and interface inflammation and more prominent plasma cell infiltration in AIH compared to DI-AIH, while central perivenular inflammation was present in both scenarios (5). In addition, fibrosis has been shown to be more common in AIH compared with DI-AIH (6). However, it should be noted that fibrosis may not be as prominent in acute AIH cases. Our study did not include a control group consisting of other etiologies, such as DI-AIH or chronic viral hepatitis. As clinically verified liver biopsy cases of DI-AIH are relatively rare, a multicenter or multinational study would be necessary to evaluate the histological differences between AIH and DI-AIH and the applicability of existing histological scoring systems in diagnosing DI-AIH.

Finally, clinicopathological correlation and active communication between the pathologist and hepatologist are crucial in optimizing the histological diagnosis of AIH. The current IAIHG systems include histology scores, suggesting that histology is pivotal in making a clinical diagnosis of AIH. For the pathologist, having access to the clinical information, including laboratory findings and medication history, facilitates the histopathological interpretation of liver biopsies in this context.
References


