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TREATMENT OF AUTOIMMUNE HEPATITIS: WHAT IS THE OPTIMAL END POINT ON FOLLOW-UP BIOPSY?

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Introduction The authors have reported¹ that following immunosuppressive treatment of Autoimmune Hepatitis (AIH), many patients fail to achieve histological remission (necro-inflammatory score (NIS) ≤ 3), despite attaining biochemical remission (normal serum ALT). A recent report² suggests that, following treatment, a NIS ≤ 5 is not associated with fibrosis progression and hence, may be an acceptable treatment outcome.² The authors therefore aimed to assess the associations of NIS on follow-up biopsy within the range 0–5, with change in fibrosis and survival.

Methods The authors studied 114 patients with AIH by IAIHG criteria (81 definite, 94 female, mean age 48.7 $\pm$ 1.7 years), treated initially with reducing dose prednisolone and 1 mg/kg azathioprine, who had achieved normal serum ALT and a NIS between 0 and 5 on follow-up biopsy (performed at median (range) 2.16 (0.65–13.67) years) after diagnosis (paired diagnostic and follow-up biopsies available in 93 patients). Biopsies were graded using the Ishak system.

Results Fibrosis score between baseline and follow-up biopsy decreased in patients with follow-up NIS 0–3 (mean 3.4 $\pm$ 0.24 to 2.7 $\pm$ 0.21, n=59 p=0.001) but was unchanged in those with follow-up NIS of 4 or 5 (3.5 $\pm$ 0.3 to 3.4 $\pm$ 0.3, n=34 p=0.846). Fibrosis score on follow-up biopsy was higher in patients with NIS 4–5 (n=40) than with NIS 0–3 (n=72) (mean 3.3 $\pm$ 0.3 vs 2.4 $\pm$ 0.2, p=0.014). Regression of fibrosis was independently associated with lower NIS (p=0.014) and less portal inflammation (p=0.006) on follow-up biopsy, and with longer interval between the two biopsies (p=0.001). All cause death/

transplantation rate was higher in those with NIS of 4–5 than in those with NIS 0–3 (18% vs 6% and 64% vs 24% after 10 and 20 years respectively; p<0.001) and this categorisation was independently associated with survival (p=0.001). A similar trend for liver death/transplantation just failed to reach significance (p=0.07).

Conclusion In patients with AIH treated with immunosuppression, even mild histological activity (NIS 4 or 5) on follow-up biopsy is associated with more fibrosis and with reduced survival and hence may not be an optimal end point of treatment.

Competing interests None.

Keywords autoimmune hepatitis.

REFERENCES

1. Hoeroldt BSR, et al. *Gut* 2009;58(Suppl 1):A18.
2. Luth S, et al. *J Clin Gastroenterol* 2008;42:926–30.