## PTH-082 TREATMENT OF AUTOIMMUNE HEPATITIS: WHAT IS THE OPTIMAL END POINT ON FOLLOW-UP BIOPSY?

doi:10.1136/gut.2011.239301.483

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**Introduction** The authors have reported<sup>1</sup> that following immunosuppressive treatment of Autoimmune Hepatitis (AIH), many patients fail to achieve histological remission (necro-inflammatory score (NIS)  $\leq$ 3), despite attaining biochemical remission (normal serum ALT). A recent report<sup>2</sup> suggests that, following treatment, a NIS $\leq$ 5 is not associated with fibrosis progression and hence, may be an acceptable treatment outcome.<sup>2</sup> 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  $48.7\pm1.7$  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  $3.4\pm0.24$  to  $2.7\pm0.21$ , n=59 p=0.001) but was unchanged in those with follow-up NIS of 4 or 5 ( $3.5\pm0.3$  to  $3.4\pm0.3$ , 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  $3.3\pm0.3$  vs  $2.4\pm0.2$ , 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 immunosupression, 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

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