Anti-HDV-IgM as a marker of disease activity in hepatitis delta

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INTRODUCTION
Hepatitis delta frequently leads to liver cirrhosis and hepatic decompensation. As treatment options are limited, there is a need for biomarkers to determine disease activity and to predict the risk of disease progression. Anti-HDV-IgM levels may correlate with histological and biochemical activity in HDV infection. However, the exact mechanisms behind this association are unclear.

METHODS
Anti-HDV-IgM-testing was performed using the ETI-DELTA-IGMK-2 assay (Diaisorin). In addition, fifty-four cytokines, chemokines and angiogenic factors were measured in sera using multiplex technology (Bio-Plex System).

PATIENTS

Patients (%) classified into status of IgM

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<th>HDIT-2 (n=120)</th>
<th>MHH cohort (n=78)</th>
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<tr>
<td>Gender: male</td>
<td>79 (66%)</td>
<td>49 (63%)</td>
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<td>Age: 40 (20-65)</td>
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<td>Cirrhosis at baseline: 51 (43%)</td>
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RESULTS

Factors associated with IgM, grading and staging (ANOVA)

CONCLUSIONS

- Serum anti-HDV-IgM is a robust, easy-to-apply and relatively cheap marker to determine disease activity in hepatitis delta
- which has prognostic implications
- High anti-HDV-IgM levels indicate an activated immune system
- which leads to a suppression of HBV-DNA but not of HDV-RNA

* Yurdaydin et al., AASLD 2012