

ORAL PRESENTATION

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Performance of shear-waves elastography in the non-invasive assessment of liver fibrosis in chronic hepatitis in the Romanian population

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From The 10th Edition of the Scientific Days of the National Institute for Infectious Diseases "Prof Dr Matei Bals"

Bucharest, Romania. 15-17 October 2014

Background

Liver fibrosis is one of the major factors associated with progression of liver disease in chronic HBV [1] or HCV [2,3] infection, but also in metabolic diseases with impact on the liver.

Methods

We have performed a study to determine liver stiffness in patients with chronic hepatitis in Romania. One trained operator performed shear-waves elastography (SWE) using Aixplorer (SuperSonic Imagine, Aix-en-Provence, France) in all consecutive patients monitored in our clinic over the course of 7 months, from January 2014 to July 2014.

Results

We have examined a total of 80 patients with chronic hepatitis, of which 58.8% had HCV infection, 16.3% HBV infection, 6.3% HBV + HDV coinfection, 2.5% ASH, 2.5% HIV infection and 13.8% had idiopathic liver involvement. The male-to-female ratio was 0.86:1, and the mean age was 48.6 ± 14.9 years.

The mean duration of hepatic disease evolution was 7.6 ± 5.7 years, longer for HCV infection (mean 8.3 ± 5.9 years) than for HBV infection (4.75 ± 3.9 years, $p = 0.028$). The overall mean SWE liver stiffness was 9.6 ± 5.3 kPa, higher in patients with HCV infection (10.8 ± 5.9 kPa) than in those with HBV infection (6.98 ± 1.9 kPa, $p =$

0.009). Overall, 37.5% of patients were classified as F0-F1 on SWE, 25.0% F2, 8.8% F3 and 28.7% F4.

Liver cirrhosis was present in 28.7% of patients and hepatocellular carcinoma had already been diagnosed in 6.3% of all patients and in 21.7% of all patients with cirrhosis (5 cases, of which 4 had been previously diagnosed with cirrhosis with HCV – 3 cases, and HBV + HDV – 1 case, and 1 had an idiopathic cause for liver involvement and a stiffness corresponding to F0-F1 on SWE).

Conclusion

There seem to be significant differences between two of the main groups of patients examined, with a longer duration of infection and an accordingly higher liver stiffness in the chronic HCV group, when compared to the chronic HBV group.

Acknowledgement

This paper is partially supported by the Sectoral Operational Programme Human Resources Development (SOP HRD), financed from the European Social Fund and by the Romanian Government under the contract numbers POSDRU/159/1.5/S/137390.

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Published: 15 October 2014

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doi:10.1186/1471-2334-14-S7-O15

Cite this article as: Stoica *et al.*: Performance of shear-waves elastography in the non-invasive assessment of liver fibrosis in chronic hepatitis in the Romanian population. *BMC Infectious Diseases* 2014 **14** (Suppl 7):O15.

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