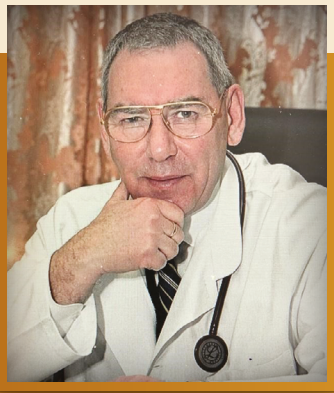
2nd GLOBAL LIVER HEALTH FORUM

DETECTING STEATOSIS IN CLINICAL PRACTICE – INSIGHTS FROM THE EPOCH REGISTRY



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DETECTING STEATOSIS IN CLINICAL PRACTICE – INSIGHTS FROM THE EPOCH REGISTRY

Steatosis: the clinical implications and current diagnostic methods

Diagnosing NAFLD is often difficult due to the presentation of non-specific symptoms and the limitations of current screening methods. The presence of liver steatosis is central to the diagnosis of NAFLD. Research has found that, in people with liver steatosis, there are increased rates of hepatocellular carcinoma, cardiovascular death and severe COVID-19 compared with people without liver steatosis.[1–3] Liver steatosis is typically detected using ultrasound, liver biopsy or MRI. However, the applicability of these methods has limitations due to insufficient availability of diagnostic imaging in many countries and the invasive nature of liver biopsies.[4] Non-invasive methods such as diagnostic indices are often unreliable and lack sufficient validation.[5] Additionally, these methods lack the specificity to detect NASH. Therefore, there is a need for a reliable, fully non-invasive liver steatosis screening tool.

The St-index: a non-invasive screening tool for liver steatosis

The EPOCH-1 study was a retrospective analysis of over 48,000 Russian outpatients from an epidemiological, observational, cross-sectional, multicentre study. The aim of this real-world study was to develop a new, non-invasive screening test for NAFLD that focused on liver steatosis.[6]

The St-index was established based on a multiple regression model of non-invasive factors associated with NAFLD. The index comprises three questions; age, presence of type 2 diabetes and waist-to-height ratio and is therefore completely non-invasive. With 93.8% sensitivity and 91.4% specificity, the St-index provides physicians with a reliable, fully non-invasive means for diagnosing NAFLD in routine clinical practice.[6]

The correlation between EPL adherence and subjective treatment satisfaction and improvement of clinical outcomes

Previous studies have demonstrated treatment with EPLs cause steatosis regression and are associated with high subjective treatment rate.[7,8] The EPOCH-2 study evaluated adherence to and rate of satisfaction with EPL therapy and the relationship between these factors and changes in clinical outcomes in Russian NAFLD patients.[9]

Overall, 82.2% of patients were adherent to 12 weeks of EPL treatment, and almost two-thirds of patients (64.4%) and clinicians (65.9%) reported very high satisfaction with treatment. Patients' adherence and satisfaction were positively correlated with significant improvements in liver enzymes, lipid levels, liver fat content and reduction in number of symptoms after 24 weeks of EPL therapy.[9]

The study also found that male patients and those with unhealthy lifestyle habits (such as high alcohol consumption, smoking cigarettes and consumption of high-fat foods) or more comorbid conditions showed the greatest changes from baseline in laboratory parameters following EPL therapy. This study highlights the importance of adherence to EPL therapy in these patients.[9]

Russian NAFLD guidelines: what real-world data has provided

Based on the results of the two EPOCH studies, the current Russian NAFLD guidelines incorporate the use of the St-index for liver steatosis screening and recommend EPLs as a basic therapy for NAFLD.[10] As demonstrated by the EPOCH studies, real-world data can provide insights into reliable screening tools and effective therapies for NAFLD and those insights can be used to shape NAFLD guidelines.

References

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Learning objectives:

- Identify the key limitations of the available screening methods for NAFLD
- Explore the use of the St-index as a fully non-invasive screening tool for liver steatosis
- Understand the positive correlations between patients' adherence and satisfaction and improvement in clinical outcomes after 24 weeks of EPL therapy
- Understand the importance of adherence to EPL therapy in a subgroup of patients with comorbidities and unhealthy lifestyles
- Recognise the use of real-world data in incorporating recommendations into the Russian NAFLD guidelines

Main takeaways:

- NAFLD is often hard to diagnose due to the presentation of non-specific symptoms and the limitations of current screening methods
- The EPOCH-1 study used real-world data to develop the St-index: a completely non-invasive screening tool for liver steatosis
- Patients' adherence to and satisfaction with EPL therapy were positively correlated with significant improvements in laboratory parameters and a reduction in number of symptoms
- Patients with unhealthy lifestyle habits or more comorbidities showed the greatest changes from baseline in laboratory parameters following treatment with EPLs

COVID-19, coronavirus disease; EPL, essential phospholipid; MRI, magnetic resonance imaging; NAFLD, non-alcoholic fatty liver disease.

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