2nd GLOBAL LIVER HEALTH FORUM

ESSENTIAL PHOSPHOLIPIDS – THE LATEST EVIDENCE REVIEWED

Dr Asad Dajani

Asad Dajani Specialized Clinic, with affiliation to Medcare and Saudi German hospital, Sharjah, United Arab Emirates

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The importance of treating patients with NAFLD

NAFLD and NASH represent serious conditions that have long-term health implications for patients. Patients with NAFLD or NASH have an increased risk of overall mortality, liver mortality and cardiovascular disease compared with healthy adults and, in the presence of comorbid type 2 diabetes, have an increased risk of hypertension. In addition to endocrinopathies that can result from liver damage, patients with advanced fibrosis and cirrhosis from NAFLD and NASH are at increased risk of developing hepatocellular carcinoma.

The unmet need in NAFLD treatment

Despite the substantial disease burden of NAFLD, there are currently no first-line pharmacotherapies licensed to treat it. NAFLD management comprises lifestyle intervention and pharmacologic treatment of comorbidities.[1] There is currently an inconsistent evidence base for the effect of medications used for the treatment of comorbid conditions associated with NAFLD.

Essential phospholipids – a hepatoprotective agent

Pharmacological substances that can limit hepatic damage, known as 'hepatoprotective agents' have been identified as a promising treatment for patients with NAFLD.[2,3] One such hepatoprotective agent is essential phospholipid (EPL).[3,4] EPL activity in the liver results in multiple protective outcomes, including the conversion of neutral fats and cholesterol into easily metabolised forms, improved hepatic detoxification and decreased fatty infiltration of the liver.[5] There are licensed EPLs that are now recommended for use in patients with NAFLD in China, Russia, Latvia and Poland.[2,6–8]

Essential phospholipids – the evidence

Dr Dajani's presentation provides a detailed overview of the latest evidence of EPLs in patients with NAFLD. In patients with NAFLD without type 2 diabetes or hyperlipidemia, 72 weeks of EPL therapy resulted in reductions in mean ALT from 87 to 41 IU/mL and AST from 72 to 49 IU/mL before therapy to after therapy, respectively. Additionally, 14.2 and 29.2% of patients with NAFLD experienced overall improvements in elastography and echography results from baseline, respectively.[9]

Patients with NAFLD and type 2 diabetes or hyperlipidemia also experienced improvements in ALT (84 to 38 IU/mL and 91 to 44 IU/mL) and AST (68 to 41 IU/mL and 78 to 40 IU/mL) before and after EPL therapy, respectively. Overall improvements in echography (23.4 and 20.2%) and elastography (26.1 and 20.2%) results were also seen in patients with NAFLD and type 2 diabetes or hyperlipidemia, respectively.[9]

What can the latest literature review tell us?

Dr Dajani then presents the findings of a recent literature review of hepatoprotective agents, particularly EPL, in patients with NAFLD.[10] Of the 20 studies included in this review, 11 studies reported the use of EPL therapy in patients with NAFLD alone. The results of these studies supported the use of EPL therapy in these patients. The review also covered the use of EPL therapy in patients with NAFLD and type 2 diabetes; the results of three studies showed that EPL as adjunctive therapy to metformin improved clinical outcomes in patients, compared with metformin or standard of care alone. These findings were also supported by a meta-analysis of studies of patients with NAFLD and type 2 diabetes, where EPL therapy plus antidiabetic therapy was found to significantly reduce ALT, triglyceride and cholesterol levels compared with antidiabetic therapy alone.[11] EPL therapy was also found to improve clinical outcomes in patients with NAFLD and hyperlipidemia or obesity in the four studies of EPL therapy in these patients included in this review.[10] The results of a large study of EPL therapy in patients with NAFLD and cardiometabolic comorbidities, the MANPOWER study, support these findings. In the MANPOWER study, significant improvements from baseline in liver echogenicity and liver structure were seen in 68.3 and 42.7% of patients, respectively.[12]

The results of this literature review also indicated that there is a large amount of evidence supporting the use of EPL in patients with NAFLD. Additionally, patients who receive EPL therapy have a higher probability of experiencing improvements in clinical outcomes versus those receiving other major hepatoprotective agents.[10]

The results of the latest literature review of EPL therapy in patients with NAFLD, NASH and other fatty liver diseases also showed that EPLs have a good safety profile in these patients.[10]

There is a growing evidence base supporting the use of EPL therapy in patients with NAFLD to limit hepatic damage and to help control comorbid conditions.

References

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Learning objectives:

- Understand the importance of treating NAFLD early and the need for more effective therapies with a consistent clinical evidence base
- Review the evidence supporting EPL therapy for use as supportive treatment of liver diseases
- Explore how EPLs as adjunctive therapy can be used to manage outcomes in patients with NAFLD

Main takeaways:

- NAFLD and NASH are associated with an increased risk of fibrosis, hepatocellular carcinoma and mortality compared with people without NAFLD; however, there is currently a lack of treatments with a consistent evidence base for these conditions
- EPL given as adjunctive therapy in patients with NAFLD, with or without type 2 diabetes or obesity, is associated with improved clinical outcomes compared with standard of care alone
- Adjunctive therapy with hepatoprotective treatments may offer a reliable therapeutic strategy for NAFLD

ALT, alanine aminotransferase; AST, aspartate aminotransferase; EPL, essential phospholipid; NAFLD, non-alcoholic fatty liver disease; NASH, non-alcoholic steatohepatitis.

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