



High compliance and treatment satisfaction with essential phospholipid treatment of patients with non-alcoholic fatty liver disease

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There are numerous randomized controlled studies showing that the intake of essential phospholipids (EPL) can reduce steatosis and improve liver function parameters. Based on these studies EPL are named in several national guidelines as one recommended treatment for non-alcoholic fatty liver disease (NAFLD). A retrospective analysis of three observational studies has now investigated the extent to which compliance and patient satisfaction with EPL treatment correlate with laboratory values and ultrasound parameters in a real-world setting.

High compliance and few treatment discontinuations

Non-alcoholic fatty liver disease (NAFLD) is among the main causes of liver disease [1] and is associated with an increased risk of cancer [2]. Clinical studies and a recent meta-analysis in NAFLD patients have shown that the intake of essential phospholipids (EPL) can reduce liver fat accumulation (steatosis) [3]. EPL are recommended in national guidelines in several countries, including Russia, Latvia, Poland, and China [4–7]. EPL were linked with objective as well as subjective improvements in various studies. A retrospective analysis of three observational studies including 3,384 patients with NAFLD was recently performed to evaluate the extent to which patient compliance and satisfaction with EPL treatment correlate with changes in clinical parameters [2]. During a 12-week period of EPL treatment (600 mg three times daily), 82.2% of patients were compliant, 8.0% gave insufficient information about their treatment compliance (this was assessed as non-compliance), 7.9% reported treatment gaps of more than one day, 1.5% had changed the dosage and 1.8% stated that they had forgotten to take the medication several times. Only 0.3% of patients reported that they had stopped treatment prematurely; the main reasons for discontinuing treatment were an improvement in well-being ($n = 5$), individual decision by the patient ($n = 1$), worsening of a chronic concomitant disease ($n = 1$), accumulation of pancreatic fluid ($n = 1$) or unknown ($n = 3$).

Treatment compliance correlates with positive effects

After 24 weeks (± 1 week) of treatment, compliant patients showed a significant decrease ($p < 0.05$) in plasma levels of fasting blood glucose, total cholesterol, VLDL and total bilirubin as well as of HbA_{1c} values, compared to non-compliant patients [2]. Furthermore, patients who had complied with the treatment, had significantly better ultrasound parameters ($p < 0.001$). Male patients, patients with unhealthy lifestyles and/or comorbidities responded more strongly to the EPL therapy [2]. At the end of the 24 weeks of EPL therapy, a significantly higher proportion of compliant patients showed a reduction in symptoms compared to non-compliant patients (91.1 vs. 73.9%; $p < 0.0001$; **Fig. 1A**).

High patient satisfaction

A similar relationship was found with regard to the correlation between treatment outcome and clinician and/or patient satisfaction. Of the 634 cases included in the retrospective analysis of treatment satisfaction, almost two-thirds of patients (64.4%) and clinicians (65.9%) were very satisfied with the EPL treatment (10 out of 10 possible points on the satisfaction scale) (**Figs. 2A and B**). Negative assessments (≤ 4 points) were reported by fewer than 1.5% of clinicians and patients, which provided additional evidence of the positive perception of the EPL treatment. Overall, compliance and patient satisfaction increased together with significant

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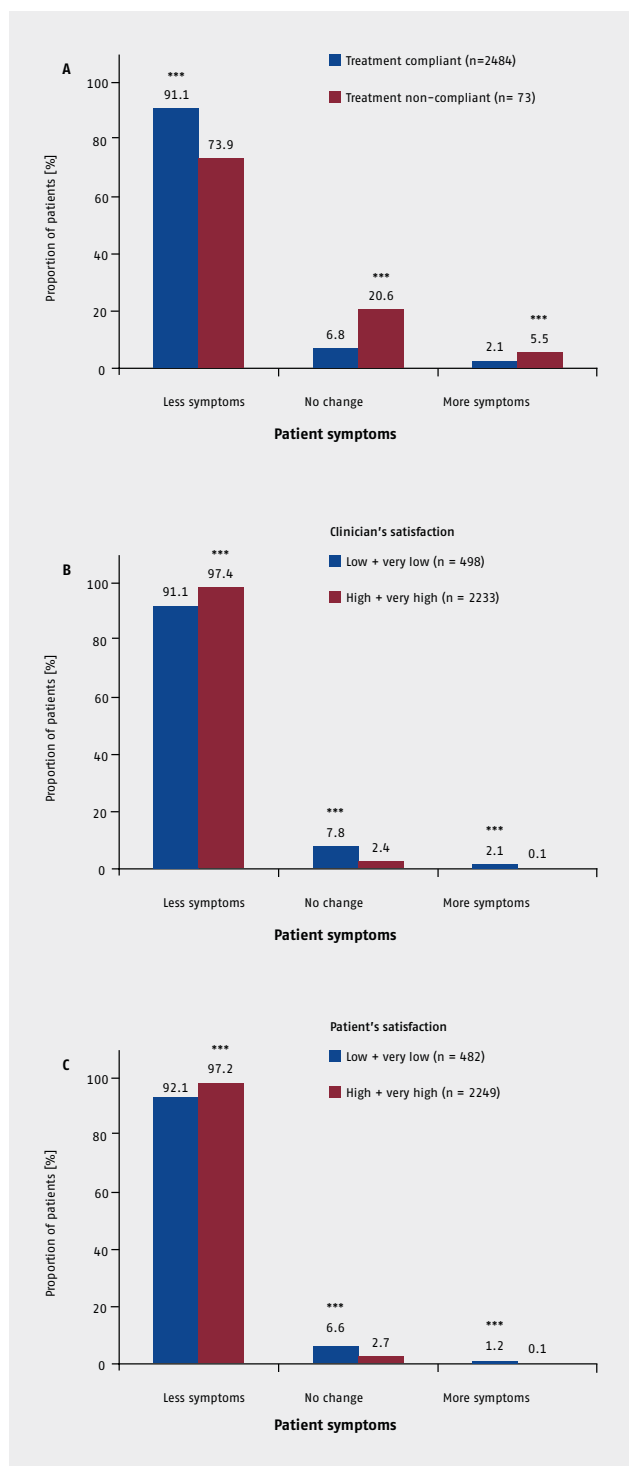


Fig. 1. Changes in patient symptoms after 24 weeks (± 1 week) of treatment with EPL, categorised according to A) compliance, B) clinicians' satisfaction and C) patients' satisfaction. (Data from [2])

improvements ($p < 0.05$) in liver enzymes, liver fat content (steatosis) and symptoms after EPL treatment. A significantly higher proportion of patients and/or their clinicians who recorded high or very high values of satisfaction with the treatment, showed symptomatic improvements (reduced number or intensity of symptoms) compared to patients with low or very low satisfaction ($p < 0.001$; Figs. 1B and C). Treatment compliance and satisfaction therefore correlated with positive effects of EPL on the course of the disease.

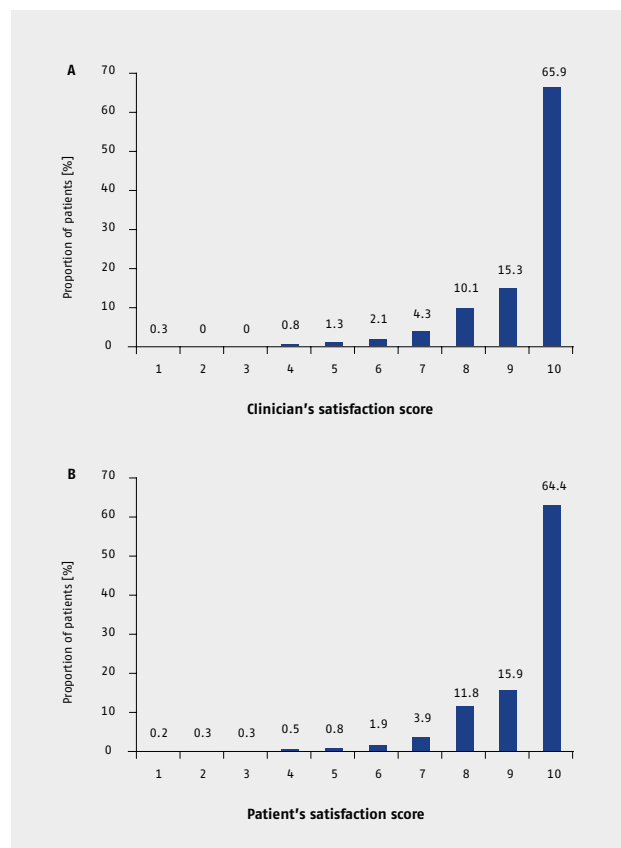


Fig. 2. Satisfaction of A) clinicians and B) patients after 12 weeks (± 1 week) of treatment with EPL. (Data from [2])

The strong relationship between treatment compliance and outcome highlights the importance of monitoring the compliance of EPL intake in patients with NAFLD when EPL was prescribed.

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