

ORIGINAL RESEARCH

EXPERIENCE OF TREATMENT OF CHRONIC ALCOHOLIC HEPATITIS WITH LIVOLIN FORTE

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Alcoholic liver disease (ALD) is one of the most common, and accounts for 30-40% damage in liver structure [1]. Unlike viral hepatitis, treatment of which is stipulated by international documentation [11], therapy of ALD is not regulated and that's why it varies from time to time. The only issue that does not create any contradictions is withdrawal from alcohol in order to achieve curative effect. Moreover, some people insist that there is no need to use other curative measures except overcoming abstinence symptoms [10].

Among all the drugs used for ALD treatment, the ones that proved to be most effective contain essential phospholipids, alkaloid of silymarin, polyvitamins [3, 5, 6].

Efficacy of ALD treatment with compound drugs containing essential phospholipids and vitamin complex has been studied the least. One of the most important drugs of this kind is Livolin Forte produced by Mega Life-Sciences. One capsule of this drug contains 300 mg of essential phospholipids, 10 mg of vitamin B₁, 6 mg of vitamin B₂, 10 mg of vitamin B₆, 10 mg of vitamin E, 30 mg of nicotinamide and 0.01 mg of vitamin B₁₂. Only few publications are devoted to efficacy of its application [4, 7, 9]. However, authors of these publications did not study the content of vitamins in patient's body before and after treatment, which is an indicator of liver condition in patients with ALD along with other clinical symptoms.

This fact provided substantial reason to perform the proposed study.

Objective of the research: to study efficacy of chronic alcoholic hepatitis (CAH) monotherapy with Livolin Forte according to results of clinical and biochemical tests, including determination of content of water-soluble vitamins before and after treatment.

Materials and methods of the research

20 patients (12 men and 8 women aged 21 to 53) with CAH of minimal and average activity (according to Los Angeles classification of liver diseases, 1994) have been observed.

Assessment of encephalopathy, asthenovegetative, dyspeptic, pain and jaundice syndromes was done before and after a 3-week course of treatment with Livolin Forte in dose of 3 capsules per day. There's also been definition of biochemical factors that indicate functional condition of liver: total protein and bilirubin, thymol test, alkaline phosphatase (ALP), ALT, AST. Levels of vitamins C, PP, B₁ and B₂ in blood plasma have been determined according to methods proposed by Y.I. Tomashevsky and O.Y. Tomashevskaya [8].

Results and their analysis

According to data presented in table 1, before the treatment all patients suffering from CAH had symptoms of alcoholic encephalopathy, which remained even after the completion of therapy. This indicates irreversible changes in personality of an alcoholic, whose body practically doesn't respond to therapy with hepatotrophic drugs. This fact is supported by data obtained by other

researchers [2, 6]. However, clinical signs of asthenovegetative, dyspeptic, pain and jaundice syndromes disappeared in 50, 65, 65 and 15% of patients correspondingly. Table 2 presents results of biochemical liver tests before and after the course of treatment with Livolin Forte. Due to the therapy, thymol test, levels of total bilirubin, AST and ALT were significantly reduced. However, total proteins and alkaline phosphatase levels remained the same. Changes in biochemical and clinical parameters indicate curative effect of the drug, which was prescribed in the form of monotherapy.

Table 1. Dynamics of clinical syndromes in patients suffering from CAH under the influence of treatment with Livolin Forte

Clinical syndrome	Before treatment	After treatment
Chronic alcoholic encephalopathy	20 (100)	20 (100)
Asthenovegetative	18 (90)	8 (40)
Dyspeptic	17 (85)	4 (20)
Pain	15 (75)	2 (10)
Jaundice	7 (35)	2 (10)

Note. Percentage is given in brackets.

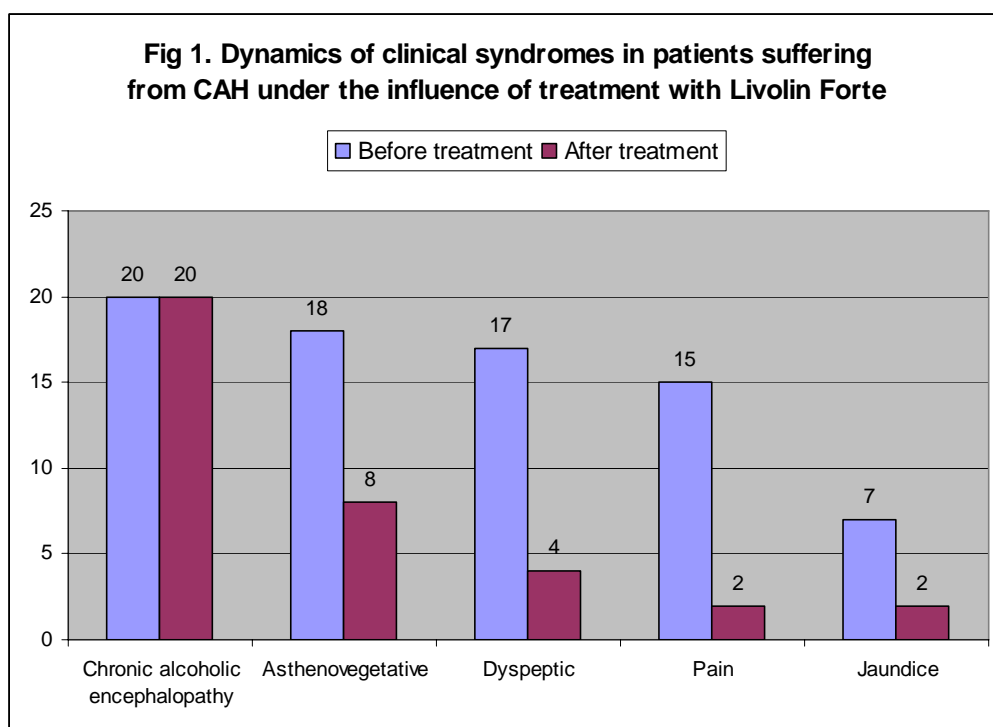


Table 2. Dynamics of biochemical tests results for patients suffering from CAH under the influence of treatment with Livolin Forte

Time of examination	AST, mM/l	ALT, mM/l	Bilirubin, mcmol/l	ALP, nmol/s/l	Protein, g/l	Thymol test, unit
Before treatment	1.4±0.1	1.5±0.3	26.5±2.7	2125±170	65.2±0.81	7.5±0.15
After treatment	0.4±0.05	0.6±0.08	12.7±1.8	2089±184*	67.5±0.90*	5.5±0.21

*Note. * Test results before and after treatment are not validated.*

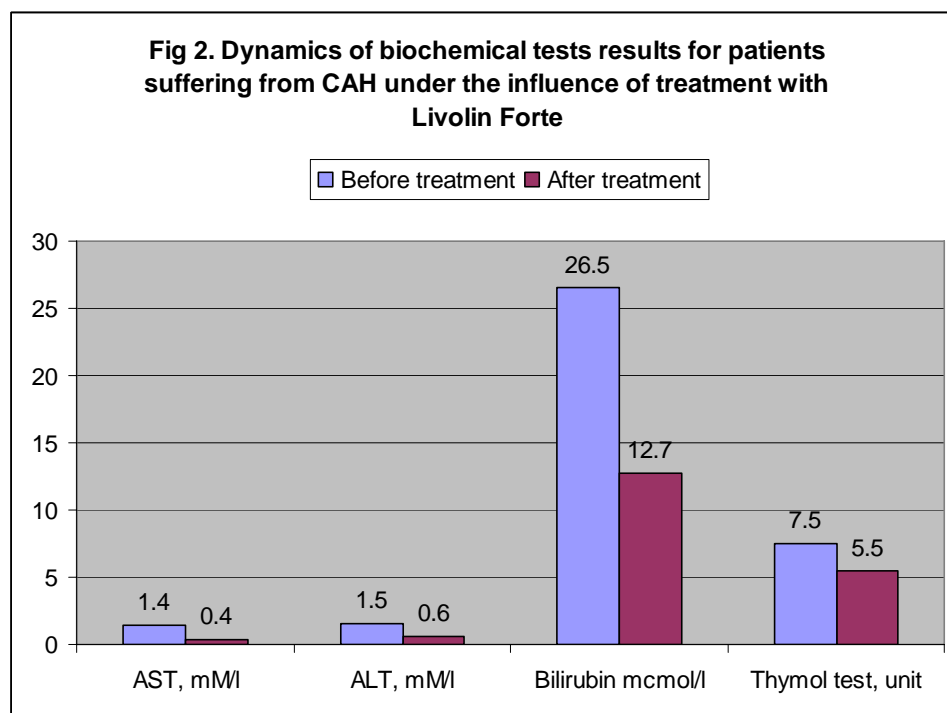


Table 3. Dynamics of content of water-soluble vitamins in the blood stream of patients suffering from CAH under the influence of treatment with Livolin Forte

Time of examination	C, mcmol/l	PP, mcmol/l	B ₁ , nmol/l	B ₂ , nmol/l
Before treatment	34.1±1.3	37.1±2.5	79.1±7.0	82.7±6.9
After treatment	37.3±1.6*	48.4±2.1	107.7±5.2	109.6±7.4

*Note. * Test results before and after treatment are not validated.*

Data in table 3 indicate dynamics of changes of content of water-soluble vitamins in the blood stream. Due to the treatment, concentration of vitamins PP, B₁ and B₂ in the blood stream increased. Level of vitamin C content remained the same; we think this is due to the fact that Livolin Forte does not contain this vitamin. We consider it necessary to prescribe this vitamin in addition to Livolin Forte in curative dose of 150-200 mg per day.

Thus, compound drug Livolin Forte that effectively combines two powerful agents (essential phospholipids and vitamin complex) for treating ALD, undoubtedly has good curative effect confirmed by clinical and biochemical tests, including direct determination of content of water-soluble vitamins in the blood stream. The drug can be recommended for monotherapy of patients suffering from CAH with minimal and average activity. This is especially relevant as such patients are usually treated with a combination of several drugs, which makes such therapy expensive and risky due to possible side-effects.

Conclusions

1. When prescribed as a 3-week course of monotherapy with dosage of 3 capsules per day, Livolin Forte drug removes various clinical syndromes of the disease in 25-65% of patients.
2. Livolin Forte effectively improves biochemical liver tests and increases the content of vitamins PP, B₁ and B₂ in blood on an average by 25%.
3. Livolin Forte can be recommended for monotherapy of patients suffering from CAH of minimal and average activity.

LIST OF REFERENCES

1. *Babak O.Y.* Chronic hepatitis. – K.: Blitz-Inform, 1999. – 208 p.
2. *Vdovychenko V.I., Bidyuk O.A., Kopiy N.L. and others.* Experience of application of silymarin and vitamin complex in treatment of patients suffering from alcoholic liver disease // *Pract. med.* – 2004. – No. 3. – P. 68-70.
3. *Gunderman K.-Y.* Latest data on action mechanisms and clinical efficacy of essential phospholipids // *Clin. perspectives of gastroenterol., hepatol.* – 2002. – No. 2. – P. 21-24.
4. *Degtyareva I., Kozachok M., Kuts T., Osyodlo G.* Hepatoprotective therapy of chronic liver diseases // *Medicines of Ukraine.* – 2004. – No. 11. – P. 100-103.
5. *Ivashkin V.T.* Anti-fibrillation therapy: the present and future // *Mater. of sympos. "Liver fibrosis".* – M., - 2004. – P. 17-22.
6. *Kovalchuk Y.S.* Content of water-soluble vitamins in the body as criterion of diagnostics and treatment efficacy of alcoholic liver disease: Abstract of a thesis... cand. of med. science. – 2001. – 20 p.
7. *Kosinskiy G., Deneka E., Tkachuk O.* Hepatoprotective therapy: morphologic aspects // *Medicines of Ukraine.* – 2005. – No. 5. – P. 58-60.
8. International system of units in clinical vitaminology / *Method. recommend.* – Lviv: LNMI, 1981. – 38 p.
9. *Svintsytskiy A.S., Revenok E.N., Solovyova G.A., Tkachuk A.I.* Evaluation of Livolin Forte efficacy in treatment of patients with steatohepatitis // *Medicines of Ukraine.* – 2004. – No. 2. – P. 63-64.
10. *Sherlock Sh., Dooley J.* Diseases of the liver and biliary system: *Pract. guidance: Trans. from English.* / Edited by A.G. Aprošina and N.A. Mukhina. – M.: Geotar Medicine, 1999. – 864 p.