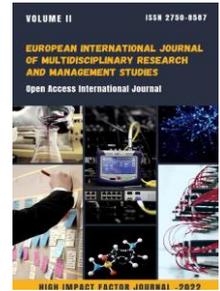


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**THE ROLE OF NUTRITION IN THE MANAGEMENT OF CHRONIC HEPATITIS*****Jalolov N.N.****Tashkent Medical Academy, Uzbekistan****Imamova A.O.****Tashkent Medical Academy, Uzbekistan****Kobilzhonova Sh.R.,****Tashkent Medical Academy, Uzbekistan***ABOUT ARTICLE****Key words:** Chronic liver disease, nutrition, hepatitis, diet, diet therapy.**Received:** 01.02.2023**Accepted:** 05.02.2023**Published:** 10.02.2023**Abstract:** Hundreds of millions of people around the world are unaware that they are living with a chronic infection. Chronic hepatitis, without exaggeration, is one of the most important medical and social problems in all countries of the world without exception. Not taking into account the relationship between drug and dietary nutrition in chronic liver diseases reduces the effectiveness of treatment.**INTRODUCTION**

Chronic viral hepatitis (CVH), which occupies a leading position in the structure of all liver diseases, is one of the most important and complex problems of world health care. This situation is associated with their ubiquitous distribution, high morbidity, as well as significant economic costs for diagnostic and therapeutic processes.

According to the World Health Organization (WHO), in 2019[6]:

- 296 million people worldwide live with hepatitis B
- 58 million people worldwide live with hepatitis C
- 1.5 million people were newly infected with chronic hepatitis B.
- 1.5 million people were newly infected with chronic hepatitis C.

Both hepatitis B and hepatitis C can lead to lifelong infection. WHO estimates that 1.1 million people died in 2019 from these infections and their consequences, including liver cancer, cirrhosis and other conditions caused by chronic viral hepatitis.[6]

Hepatitis A and hepatitis E infections do not lead to chronic infection, but can be severe and cause liver damage and death. Outbreaks of these infections occur worldwide, especially in parts of the world with poor sanitation.

Currently, medicine uses various directions in the treatment of chronic hepatitis. Among them, diet therapy is considered one of the optimal solutions used in the prevention and treatment of chronic hepatitis [10,3].

Purpose of the study

The importance of nutrition in patients with chronic hepatitis and the effect of diet therapy on the course of the disease.

Results and discussion. It is known that acute and chronic hepatitis are the result of a three-way interaction: the virus-causative agent, the immune system and the liver, as a result of which the process of damage to the liver cells is triggered. In this case, the leading role is given to the enhancement of lipid peroxidation as a factor in the violation of the integrity of cell membranes [5,4]. Due to the defeat of the hepatocyte in the liver, a decrease in the bioenergetic regime of chemical transformations is observed, all types of metabolism are disturbed - protein, carbohydrate, fat, pigment, etc.; the synthesis of proteins (albumin, blood coagulation factors), various vitamins is inhibited, the use of glucose, amino acids for the synthesis of complex protein complexes, biologically active substances worsens, the processes of transamination and deamination of amino acids slow down, there are difficulties in the excretion of conjugated bilirubin, esterification of cholesterol, etc. [19].

Along with the inhibition of the main types of metabolism, the detoxifying function of the liver suffers significantly, which is confirmed by the results of recent studies [17].

In connection with the above, the tasks of diet therapy for viral hepatitis are as follows:

- Restoration of the disturbed state of the liver;
- Stimulation of immune processes;
- Prevention of congestion in the biliary system;
- Strengthening the processes of regeneration.

Many clinical studies have established digestive disorders in viral hepatitis due to involvement in the pathological process of the pancreas, gastroduodenal region and damage to the exocrine function of the liver [19,14]. This explains a variety of dyspeptic phenomena in the form of a deterioration in appetite, nausea, vomiting, abdominal pain, flatulence, and unstable stools [19].

An unfavorable factor that negatively affects the processes of digestion is a violation of bile formation and motility of the biliary tract that occurs in acute and chronic viral hepatitis [13].

There is a deterioration in the qualitative composition of bile due to a decrease in the content of many of its components (bile acids, cholesterol, etc.). It is indicated that violations of the cholate-forming function of the liver and motility of the biliary tract in the process of viral hepatitis lay the foundation for the formation of a stable pathology of the biliary tract [16].

This unfavorable situation can be largely corrected by diet therapy, built taking into account the above violations of the liver.

An important point in diet therapy for acute and chronic hepatitis has been and remains the principle of compliance in the incoming food with the content of basic nutrients and energy with age-related physiological needs of the human body. First of all, this involves a balanced intake of proteins, fats and carbohydrates with food [19,3,4].

Proteins are plastic and energetic material. The main source of essential amino acids are animal proteins (milk, eggs, meat, fish). Vegetable proteins such as flour, cereals, etc. do not have an optimal set of amino acids or contain those in insufficient quantities, unlike animal proteins. Assimilated proteins of animal origin by 90%, vegetable proteins - less efficiently - by 60% [8,19].

There should be no protein deficiency in the diet of patients with viral hepatitis. This is the oldest position of nutrition, but it is also confirmed in modern clinical practice when observing patients with hepatitis A and B. It has been shown that with an inadequate diet with a lack of a protein component in patients with hepatitis A, disturbances in the system of T- and a protracted course of the disease is formed [11]. According to other clinicians, individuals whose diet was deficient in animal protein developed more severe forms of hepatitis B and its unfavorable course was observed, compared with those in patients who were on a balanced protein diet [18].

Fats, like proteins, are among the necessary components of the diet for viral hepatitis, since they perform plastic functions and are part of the cells and tissues of the body and have a high energy value [8,19].

Food fats contain polyunsaturated fatty acids and fat-soluble vitamins necessary for humans.

There are two groups of edible fats: 1) animal fats and 2) vegetable oils. The first group includes milk fats (butter and ghee), beef, mutton, pork, fish fats. The most complete is butter, rich in fat-soluble vitamins.

Vegetable oils (sunflower, corn, soybean, olive, etc.) contain fat rich in essential polyunsaturated fatty acids, as well as vitamin E and phosphatides. Vegetable oils have a lipolytic effect through the activation of lipolysis enzymes, improve cholesterol metabolism, contributing to the formation of its more labile esters.

Fats in the diet of patients with acute and chronic hepatitis consist of animals - 2/3 and vegetable - 1/3 of the total content.

In addition to the above nutritional properties, fats also contribute to the optimal absorption of proteins, vitamins, minerals and increase the palatability of food and satiety.

Carbohydrates are considered the main source of energy, they are part of the cells and tissues of the body, take an active part in metabolic processes, and contribute to the absorption of other nutrients [8].

It is known that carbohydrates are divided into simple and complex. The simple ones are mono- and disaccharides, while the complex ones are polysaccharides.

Simple and complex carbohydrates, necessary in the diet for liver diseases, are introduced with foods such as vegetables, fruits, cereals, bread, flour, sugar, confectionery.

At the same time, it is important to observe the energy balance, i.e. introduce such an amount of carbohydrates that there is no shortage of them, and therefore, the reasons for the development of dystrophic phenomena. On the other hand, it is impossible to flood the body with an excess of carbohydrates, which can contribute to excessive accumulation of fats with adverse consequences (reducing resistance to infections, the formation of allergic reactions, etc.).

The optimal content of carbohydrates in the diet should be physiological, i.e. 4 times more than the amount of proteins and fats.

In severe liver failure, a diet with a low energy value, consisting of easily digestible carbohydrates, is prescribed.

Vitamins, minerals and microelements are contained in food, however, at present, many people have hypovitaminosis, often combined with a deficiency of macro- and microelements, which is aggravated especially in diseases of the gastrointestinal tract, liver and kidneys [14,8,19].

Therefore, in case of hepatitis, it seems appropriate to prescribe foods enriched with basic macro- and microelements to children [16].

Attention is drawn to new developments, as a result of which a series of soy food-based products has been created that meet the requirements of modern dietary nutrition for gastrointestinal and liver diseases: the safety of the therapeutic effect and diversity.

In experimental studies, the hepatoprotective properties of soy proteins have been established. At the same time, on a model of chronic toxic hepatitis in rats, it was shown that the introduction of soy milk into the food of animals with hepatitis contributed to an increase in antioxidant activity and restoration of impaired liver function [7,19].

It has also been established that soy milk as a component of the diet in immunodeficient individuals contributes to positive changes in the immune status [12].

Modern soy-based dietary products are presented by domestic manufacturers, while genetically modified soy is not used. Interest in soybeans arose among Russian nutritionists due to the fact that this crop has a great biological value, does not belong to whimsical and can be grown in various climatic zones.

Research on the nutritional and medicinal properties of soybeans is carried out under the patronage and control of the Research Institute of Nutrition of the Russian Academy of Medical Sciences [9].

The main components of soy are protein and oil, the content of which in soybeans is 31-45% and 17-25%, respectively. Soy protein is closest to animal protein compared to other legumes and grains, and soybean oil is composed of saturated and unsaturated fatty acids. It is important that soy contains a large amount of vitamins, such as A, B1, B2, B3, B6, PP, P, K, E, and also has vitamin C [9].

For the dietary nutrition of patients with hepatitis, the proposed drinks rich in vitamins and minerals are soy cocktails.

Epidemiological data indicate a close relationship between an unhealthy lifestyle and therefore lifestyle correction is necessary for all patients [1,2].

More research is needed to use more diets, more plants that may show promise in treating or even evaluating treatment for chronic viral hepatitis. Finally, collaboration between hepatologists and nutritionists is an integral part of the treatment of chronic hepatitis of various etiologies. Further development and characterization of their role in the treatment of liver diseases is a good area for research.

CONCLUSION

In conclusion, it can be noted that despite the significant conservatism of dietary principles in acute and chronic viral hepatitis, there is still a “liberalization” of dietary approaches for these diseases. This, in particular, is manifested in a reduction in the duration of adherence to a strict diet and an earlier transition to the usual age-related diet, the introduction of new dietary products and nutritional supplements.

REFERENCES

1. Food for Thought: Importance of Nutrition in Alcoholic Hepatitis/ Carol Rees Parrish, M.S., R.D., Series Editor// Practical gastroenterology- march 2018. 30-7.
2. Himoto, T. Diet and Nutrition for Hepatitis. *Nutrients* 2021, 13, 1210. <https://doi.org/10.3390/nu13041210>.
3. Role of Diet in Management of Different Forms of Chronic Hepatitis in Young Adolescence/ M.M.H.Osfor, El Minshawy O, M.S.S.Arbid , and Nabila El-lithey// *The Egyptian Journal of Hospital Medicine Vol., 12 : 47 – 52 September 2003*.
4. Silva LD, Bering T, Rocha GA. The impact of nutrition on quality of life of patients with hepatitis C. *Curr Opin Clin Nutr Metab Care*. 2017 Sep;20(5):420-425.
5. Арчаков А. И. Окисление природных соединений и проблемы токсикологий / А. И. Арчаков, И. И. Карузина // *Вестник АМН СССР*. — 1988. — № 1. — С. 14—23.
6. Всемирная организация здоровья. Доклад о глобальном прогрессе в борьбе с ВИЧ, вирусным гепатитом и инфекциями, передающимися половым путем, 2021 г. Доступно по адресу: <https://www.who.int/publications/i/item/9789240027077> .
7. Гепатозащитные свойства белков сои и возможность их использования в диетотерапии хронического токсического гепатита / Л. К. Хныченко и др. // *Бюллетень экспериментальной биологии и медицины*. 2000 — № 3. — С. 283—286.

8. Диетология. 4-е изд. / Под ред. А. Ю. Барановского. — СПб.: Питер, 2012. —1024 с.: ил.
9. Дмитриев А. Соевая кулинария и диета / А. Дмитриев, В. Михайлов. — М.: ООО «Издательство «Яуза», 2000. — 207 с.
10. Клинические рекомендации EASL–EASD–EASO по диагностике и лечению неалкогольной жировой болезни печени Journal of Hepatology 2016 том 64 | 1388–1402 стр.
11. Комар В. И. Влияние неполноценного питания на клинико-иммунологические показатели у больных вирусным гепатитом А / Сб. научн. тр. Дагестанской Гос. Мед. Академии. — Махачкала, 1996. — С. 128—130.
12. Малышкин К. А. Иммунологические сдвиги, сопутствующие недостаточности питания, и иммунокорректирующие эффекты пищевых добавок: Автореф. дисс. к.м.н. — С.-Пб., 1988. — 207 с.
13. Неалкогольная жировая болезнь печени у взрослых: клиника, диагностика, лечение. Рекомендации для терапевтов, третья версия / Л.Б. Лазебник [и др.] // Экспертная и клиническая гастроэнтерология. 2021. № 185 (1). С. 4–52.
14. Никоноров В. А. Экскреторная и инкреторная функция поджелудочной железы при остром гепатите В парентерального генеза: Автореф. дисс. к.м.н. — Новосибирск, 1999. — 20 с.
15. Оценка пищевого статуса пациентов с хроническими заболеваниями печени и их диетическая коррекция/ Паттахова М.Х., Закирходжаев Ш.Я. и др.// Вестник ТМА. Ташкент 2021. №2. 153-156 стр.
16. Пархоменко Н. А. Клинико-лабораторная оценка моторики билиарного тракта и внешнесекреторной функции печени при острых, хронических вирусных гепатитах В, HBsAg — носительстве и других поражениях печени: Автореф. дисс. , 1988. — 15 с.
17. Продукты лечебного питания в терапии хронического гепатита у детей / Е. И. Шабушина и др. // Педиатрия. — 1993. — № 2 — С. 27—31.
18. Соринсон С. Н. Несбалансированное белковое питание как фактор, отягощающий течение и исходы вирусного гепатита В / С. Н. Соринсон, А. О. Орзикулов // Сб. тр. «Здоровье человека и экологические проблемы». — Кировская НПК: — 1991. — С. 122—123.
19. Т. В. Черевиченко. Диетотерапия у детей с вирусными гепатитами //Детская Инфекция 2005. № 3 34-39 стр.