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ANALYSIS OF A LOW PROTEIN DIET

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Abstract
Recommendation of a low-protein diet for patients with chronic kidney disease in the pre-dialysis period had a clear positive effect in terms of slowing down the progression, improving the metabolic parameters and nutritional status of patients. In the daily diet, protein is 0,6-0,7 g per 1 kg of body weight of patients, the main "suppliers" of energy are fats and carbohydrates, which fully satisfy the daily energy needs of patients.

Keywords: Chronic kidney disease, patients, low-protein diet, ration.

INTRODUCTION

Dietary ration specificities are reflected in different aspects of kidney function. A protein diet has a significant effect on kidney hemodynamics. The oatmeal diet consists of a large amount of carbohydrates, which leads to an increase in the rate of carbohydrate filtration, an increase in the amount of carbohydrates and amino acids in the diet.[1, 2]. In the same year, he was promoted to Major General.

The use of a low-protein diet (LPD) in patients with chronic kidney disease (CKD) reduces secondary hyperparathyroidism as a result of lowering parateriodine hormone levels in a well-manifested chole, and also reduces phosphorus in whey by increasing calcityrol products, normalizing the spectrum of fats [5].

Furthermore, by slowing down properly balanced LPD chronic kidney disease, there is no negative effect on patient survival [3].

With dialysis, IBS cannot be caused by an increased risk of osteoporosis. Therefore, it is important to choose drugs that, in their opinion, contribute to the development of chronic diseases, and not only improve well-being, but also increase cholesterol levels in the body. One of the conditions for solving this task is the recommendation of a low-protein diet that maintains a balanced set of irreplaceable amino acids. Since the creation of such a diet based solely on typical protein-preserving foods presents sufficient difficulty, there are attempts to use artificial amino acid supplements in the dietary treatment of patients with chronic kidney disease [4]. Despite its undoubted advantages, this approach also has a number of significant disadvantages, which include: the "chemical" origin of additives, the need to take a large number of tablets for a long time (up to 24 pieces per day), the fact that they contain a sufficiently high amount of calcium, the difficult absorption of drugs and a high level of.

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The other way is to prescribe a plant protein-based cop, the effect that the kidneys have on their filtering ability compared to animal proteins is several times smaller []. However, plant proteins are usually inferior in their nutritional value to meat, eggs, poultry and seafood proteins in terms of their biological value. In contrast to these, soy retains in its composition a balanced set of amino acids that are practically irreplaceable, as in animal products of origin.

However, no consistent answers have been found to date to questions regarding the significant extension of the pre-dialysis period of CKD, a diet designed to absorb low amounts of proteins of animal nature of origin.

The purpose of the study is to analyze the recommended LPD for patients with chronic kidney disease.

Research Materials and Methods

For patients from the pre-dialysis period with chronic kidney disease, a 7-day diet was developed together with employees of the Tashkent City nephrology center. The low-protein diet included mainly local foods. Food intake was set at 6 times during the day. The main nutrients and strength in the menu were calculated according to the tables of the chemical composition of food products.

Research results

Of the products that are high in animal protein not recommended for patients, meat, eggs and dairy products (cheese, cottage cheese, cream) were introduced in small quantities, limiting the amount. Meat products were allowed to be consumed 200 g, cream (15 g) and cottage cheese (20 g) once two days a week, while 30 g per day was recommended. The menu included raisins, peanuts, biscuits, honey, chocolate, butter, rice, legumes, vegetables, fruits and juices from food for patients. Patients were advised to make a recipe for our national dishes, such as quincy pilaf, pumpkin soup mastava, fish soup, vegetable soup, cabbage stuffed, shavla.

Among the current measures for the treatment of patients with chronic kidney disease, one can also include maintaining sodium balance in the body. In chronic kidney patients, the kidneys poorly secrete sodium from the body and it accumulates in the body. However, in combination with sodium, water is also captured in the body. An increase in the amount of sodium and water can in turn cause an increase in arterial pressure. Therefore, patients with chronic kidney disease are usually prescribed a diet with a low sodium content during the pre-dialysis period (most foods contain a sufficient amount of this element, and even the demand for it by a healthy human body is fully compensated for in cases where the table salt is not consumed). But even so, it is often allowed to take a small amount of table salt (usually 5-7 g per day). Therefore, patients are advised to consume all foods prepared by tyerland without salt and mix 5 grams per day.

Research has shown that, soy protein loading given a certain amount per 1 kg of body weight of healthy individuals leads to a decrease in the rate of Coptic filtration compared to animal protein loading given the same amount. This data confirms that plant proteins cause a decrease in filtration rate compared to animal proteins. It follows from this that the creation of a diet based on soy protein is considered to be a bright future, especially for the pre-dialysis period. Indeed, patients with chronic kidney disease had a positive effect on the introduction of soy in the pre-dialysis

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period with a low-protein diet, improving the nutritional status and metabolic indicators of patients, slowing the development of the disease [1].

Taking into account the above information, instead of bread consumed daily, the diet included a bread product (150 g per day) prepared with the addition of soy flour, developed with employees of the scientific and practical Center "Donmahsuloti IIChM". Bread contains (100 g) 8,1 g of protein, 1,1 g of fat, and 44,4 g of carbohydrates, with a strength of 220 kcal.

Table The main nutrients in the low-protein diet recommended for patients with chronic kidney disease (70 kg)

	1-day	2-day	3-day	4-day	5-day	6-day	7-day
Protein, g	47,0	46,2	46,2	45,2	48.9	49,3	41,6
animal protein, g	11,9	8,6	12,4	12,9	10,4	7,1	8,9
Fat, g	104,5	95,3	82,3	86,2	75,9	79,9	69,0
Carbohydrate, g	277,4	289,2	308,9	289,7	326,2	241,7	345,2
Strength, kcal	2195,5	2163,0	2111,3	2100,2	2135,1	2126,6	2113,2

The results [2] of a study by D.Fouque and co-authors showed that a diet that stored 0,6-0,8 g of protein per 1 kg of body weight during the day slowed the rate of development of kidney failure and did not cause additional side effects, including hypoalbuminemia.

The amount of proteins in the diet we recommend is 0,6 g per 1 kg of body weight.from 0,7 g.forms a gacha (Figure 1). Together with this, we can see that the bulk of the proteins are vegetable proteins (71,5-89,6%), with low amounts of animal proteins (10,4-28,6%) (table).

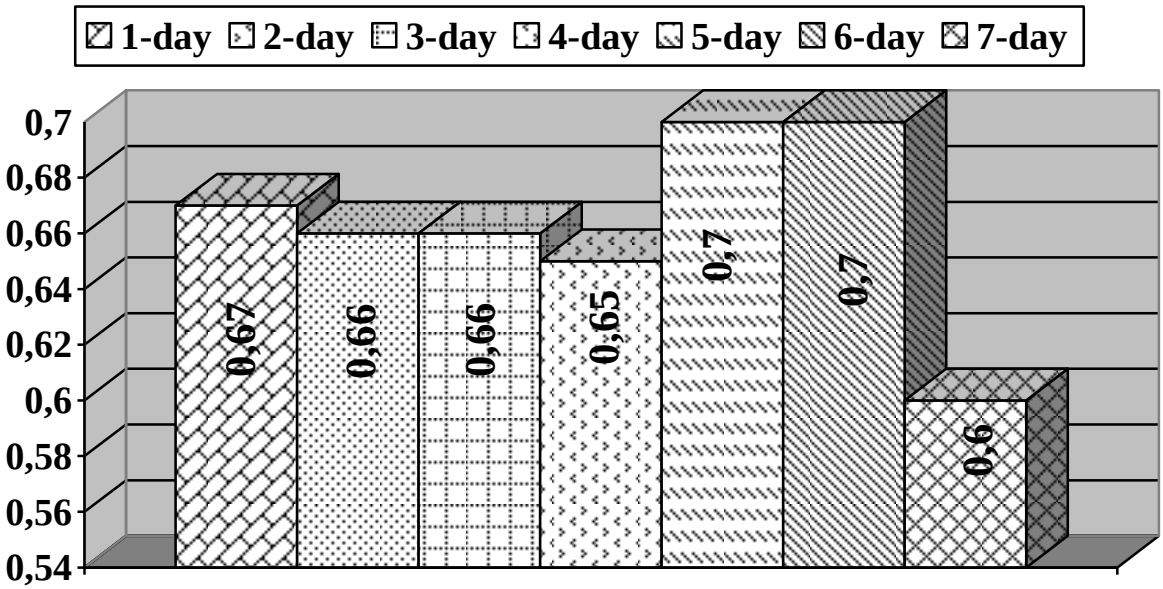

Figure 1. The amount of protein (g) in a low-protein diet (per 1 kg of weight)

It should be noted separately that, in addition to the amount and quality of protein, it is also extremely important to control the energy of the diet. It should not be lower than 30 kcal per 1 kg of body weight per day []. At this point, the strength of the kop is 30 kcal per 1 kg of weight.from 31,4 kcal.founded gacha (Figure 2).

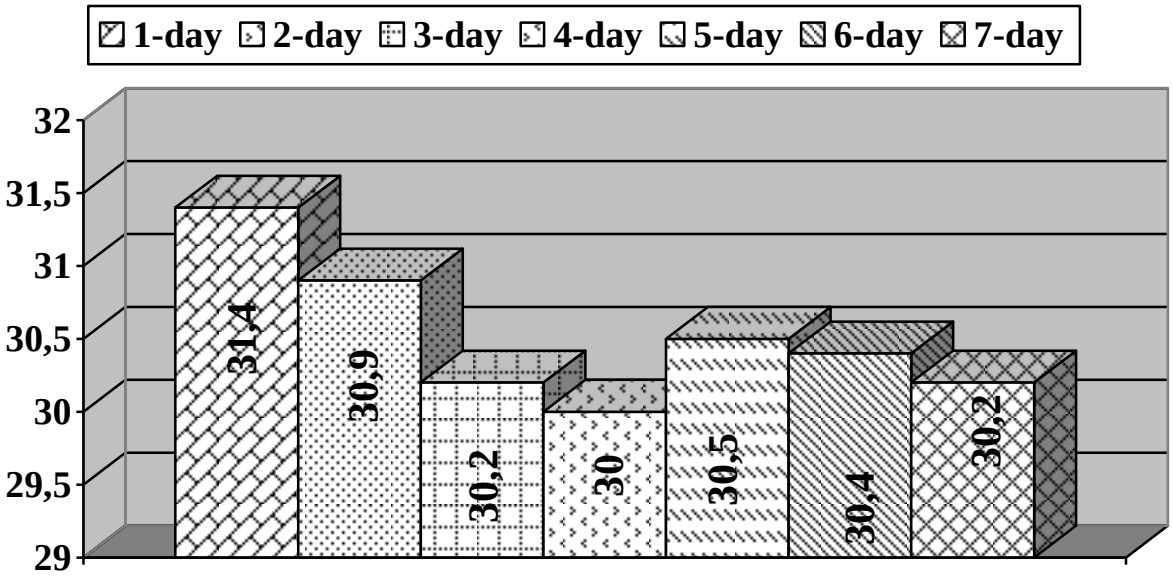

Figure 1. Low protein dietary strength (kcal, per 1 kg of weight)

It is an important factor in the treatment of patients with chronic kidney disease by the dietary method, and the discipline of patients is noted in relation to compliance with the requirements of the main component of the nutritional diet. In solving this issue, a doctor-nephrologist or a doctor-nutritionist, who seriously knows the true meaning of this problem, will be of great help. Therefore, the list of recommended and prohibited food products and the contents of the menu were distributed to the hands in the form of a booklet in order to give recommendations to patients to whom the diet was prescribed.

Conclusion. Analyzing the low-protein diet recommended for patients with chronic kidney disease, we can say that the foods included in the menu are all local and are products with high nutritional value. The proteins contained in the diet amounted to 0.6-0.7 grams per 1 kg of weight, not exceeding the norm recommended by scientists who conducted scientific research in this area. In patients in the pre-dialysis stage of chronic kidney disease, fats and carbohydrates are the main "suppliers" of energy due to the limited consumption of protein, and even in this aspect, a low protein diet is properly structured. The powerlessness of a low-protein diet completely compensated patients for their need for energy. It should be noted that in order to reduce the complications of the disease and increase the duration of life in patients with chronic kidney disease, it is necessary to conduct explanatory work on the rules of rational nutrition of patients, the correct choice of products, the correct filling of the nutrition diary.

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