Prehrana i kronične bolesti bubrega

Nutrition and chronic kidney disease

Vesna Vencl

Bjelovar General Hospital, Bjelovar

Oštećenje bubrega i slabljenje njihove funkcije zahtijevaju promjene u prehrani tih bolesnika kao važan dio njhova liječnja. Cilj dijetoterapije je olakšati funkciju oboljelog bubrega smanjivanjem unosa onih tvari koje bubreg ne može odstraniti i dodavanjem onih koje se prekomjerno gube iz organizma. Osim što dijetnim mjerama pomažemo kvaliteti i brzini liječenja, također utječemo na usporavanje i napredovanje bolesti.

Obzirom na kompleksnu ulogu bubrega u održavanju homeostaze u organizmu, određivanje dijete biti će uvjetovano vrstom bubrežnog oboljenja, stupnjem oštećenja bubrežne funkcije, pridruženim poremećajima tekućine, elektrolita, arterijskog tlaka te rezultatima analize krvi i urina. Bolesnik može biti dijabetičar ili imati alergiju na određenu vrstu hrane, a često se uz bubrežne bolesti javljaju i poremećaji metabolizma masti. Stoga, dijeta treba biti određena za svakog bolesnika posebno i usklađena s njegovim trenutnim stanjem.

Promjena prehrambenih navika je složen proces. Bolesnika treba naučiti kako da pravilnom prehranom poboljša

Kidney damage and a reduction in its functioning as an important part of treatment require dietary changes in such patients. The aim of dietotherapy is to ease the functioning of diseased kidney by reducing the intake of such substances that the kidney cannot eliminate and by adding substances that are excessively lost from the organism. Besides using dietary measures, we do not only improve the quality and speed in treatment, but we also influence the slowdown and advancement of disease.

Considering the complex role of the kidney in maintaining homeostasis in the organism, determining a diet can be conditioned by: the type of kidney disease, level of damage to kidney functioning, associated disorders in liquids, electrolytes, blood pressure and the results in blood and urine analysis. The patient can be a diabetic or have an allergy to a particular food, while often besides the kidney disease, there appears a lipid metabolism disorders. Therefore, a diet should be determined for each patient separately and conform to his/her current condition.

A change to dietary habits is a complex process. Patients should learn how to improve their health with the

svoje zdravlje. Usmenim savjetima i pisanim materijalima pomoći ćemo bolesniku usvojiti potrebna znanja da bi svoj jelovnik prilagodio ograničenjima koja pred njega stavlja bubrežna bolest. Pri tome treba paziti i na socijalno-ekonomski status bolesnika jer će on u konačnici odrediti uspjeh provođenja dijetoterapije i njenu primjenu nakon izlaska iz bolnice. Sve ovo zahtijeva angažiranost liječnika, dijatetičara, medicinske sestre, bolesnika i njegove obitelji.

Bolesnici s bubrežnom insuficijencijom imaju veliki rizik od razvoja proteinsko-energetske malnutricije. Zbog toga dijeta treba biti nutritivno-energetski uravnotežena, učinkovita te praktična i prihvatljiva u svakodnevnoj primjeni. Za održavanje konstantne tjelesne mase potreban je pravilan odnos nutrijenata. Optimalne kalorije osiguravaju se iz ugljikohidrata i masti; ugljikohidrati 50%, proteini 5%-10% i masti 35-40%, koje bi trebale biti biljnog podrijetla. Najčešće preporuke bubrežnim bolesnicima odnose se na unos bjelančevina, tekućine, soli, kalija, kalcija i fosfora.

BJELANČEVINE — s porastom oštećenja bubrežne funkcije njihov unos se smanjuje. Minimum za održavanje ravnoteže sinteze i razgradnje aminokiselina je 0,5 grama po kilogramu tjelesne težine.

TEKUĆINA — unos se ograničava kada sa slabljenjem bubrežne funkcije dolazi do zadražavanja tekućine u tijelu (edemi, hipertenzija, otežano disanje). Tada je dnevni unos tekućine jednak količini urina koju bubreg izluči u 24 h. Tekućinom se, osim vode, smatraju i svi napitci, juhe, variva, a u velikom postotku je sadržava voće i povrće.

NATRIJ — ograničavamo ga ili skroz isključujemo iz prehrane kod pojave edema i visokih vrijednosti arterijskog tlaka. Uzimanje manje slane hrane pomaže u suzbijanju žeđi, što smanjuje i unos tekućine u organizam.

KALIJ — smanjene ili povećane vrijednosti u krvi mogu ugroziti život bolesnika. Stoga je potrebno unos prilagoditi vrijednostima kalija u krvi. Nalazi se gotovo u svim namirnicama, a posebice u voću i povrću.

KALCIJ — u slučaju da je prisutan manjak kalcija u krvi, preporučit ćemo hranu bogatu kalcijem, no samo onda kada su vrijednosti fosfora u krvi normalne. Napredovanje bubrežne bolesti i neki lijekovi dovode do povišenih vrijednosti kalcija.

FOSFOR — povišene vrijednosti fosfora u krvi dužim trajanjem uzrokuju nastanak sekundarnog hiperparatireoidizma koji uzrokuje poremećaj strukture kosti. U ranijoj fazi bolesti dijetom s manje bjelančevina i ne uzimanjem hrane bogate fosforom, možemo ga održavati u granicama normalnih vrijednosti.

VITAMINI — potrebe za svima trebaju biti zadovoljene pravilnom prehranom i dovoljnim unosom hrane.

Svakom bubrežnom bolesniku treba pristupiti ponaosob, jer nemaju svi iste nutritivne potrebe. Pomno prilagođena prehrana uz redovite kontrole bitna je u prevenciji daljnje progresije bolesti, a suradljivost bolesnika je od neprocjenjive vrijednosti.

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E-mail: mladen.vencl@bj.t-com.hr

right diet. Oral advice and written material will assist the patient to adopt the necessary knowledge in order to adapt his/her menu to the limitations imposed by the kidney disease. Consequently, it is important to take into consideration the social and economic status of the patient since this will determine the success of implementing dietotherapy and its application following a discharge from the hospital. All of this requires effort by the physician, dietician, medical nurse, the patient and the family.

Patients with kidney failure have a high risk of developing protein and energy malnutrition. Therefore, the diet must be nutritionally and energetically balanced, effective and practical as well as acceptable in everyday use. In order to maintain constant body mass, it is necessary to have a correct ratio of nutrients. Optimum calories are ensured from hydrocarbons and fats; 50% hydrocarbons, 5%-10% proteins, and 35-40% fats, which are derived from plants. The most frequent recommendation to kidney patients relates to the consumption of proteins, liquids, salts, potassium, calcium and phosphorus.

PROTEINS — with an increase in damage to kidney functioning, its intake is reduced. The minimum for maintaining stability in synthesis and decomposition of amino acids is 0.5 grams per kilogram of body weight.

FLUIDS — intake is limited when the weakening of kidney functioning leads to the retention of fluid in the body (oedema, hypertension, heavy breathing). Then the daily intake of liquids is equivalent to the amount of urine, the kidney can release in a 24-hour period. Liquid is considered to be, besides water, all drinks, soups, casseroles, and to a large extent fruit and vegetables.

SODIUM — is to be limited or completely excluded from the diet with the occurrence of oedema and high values of blood pressure. Consuming less salty food assists in eliminating thirst, which also reduces the intake of liquids in the organism.

POTASSIUM -— reducing or increasing the concentrations in blood can endanger the life of patients. Therefore, it is necessary to adjust the intake to values of potassium in blood. It is found in almost all food stuffs, especially in fruit and vegetables.

CALCIUM — in the event that there is insufficient calcium in blood, we recommend food rich in calcium, but only when the values of phosphorus in the blood are normal. With the advancement of kidney disease, some medication will lead to heightened levels of calcium.

PHOSPHORUS — heightened values of phosphorus in the blood for longer periods cause secondary hyperparathyroidism leading to disorders in bone structure. In earlier stages of the illness, diets with less protein and not consuming foods rich in phosphorus, can maintain phosphorus within normal limits.

VITAMINS — the requirements for all vitamins should be satisfied through a proper diet and adequate amounts of food.

Each kidney patient should be approached separately, since not all of them have all the same nutrition requirements. Carefully chosen food along with regular check-ups are essential in preventing further progression of the disease, while cooperation by patients has an immeasurable value.