MEDICAL NUTRITION THERAPY IN MANAGEMENT OF EATING **DISORDERS**

Maja Nikolic, Milos Pavlovic and Milica M. Vojinovic

The treatment of eating disorders demands a comprehensive medical approach, where a dietitian has an important role, primarily due to numerous instances of malnutrition. The objective of this paper was to recapitulate the research findings and clinical evidence which show the importance of medical nutrition therapy in the treatment of eating disorders; furthermore, they present significant guidelines for clinical practice. The research methods have entailed a thorough exploration of literature available at research data bases. The results of the research studies published so far have unambiguously pointed out that, when eating disorders are concerned, there is an urgent need for a diet therapy in order for the patient to restore the appropriate body weight as well as normal eating habits. On the one hand, certain authors suggest returning to normal nutritional habits immediately, whereas, on the other hand, certain others advocate a diet therapy program, that is, a gradual process of recovery. Patients incapable of oral food intake receive enteral nutrition. Parenteral nutrition is applied for recovering the lost electrolytes and fluids, but it should be applied rarely, primarily in states of urgency. For patients suffering from eating disorders the increase in weight indicates good chances of recovery; therefore, the patient's nutritional status should be carefully and continuously noted. Finally, it is important that our country, too, should adopt a carefully prescribed and conducted diet therapy as an obligatory step in the treatment of patients with eating disorders. Acta Medica Medianae 2009;48(1):50-55.

Key words: eating disorders, nutrition, medical nutrition therapy, malnutrition

Faculty of Medicine in Nis

Contact: Maia Nikolic Public Health Institute in Nis 50 Dr Zoran Djindjic Blvd. 18000 Nis, Srbija Tel.: 018-226-384, ex. 140

E-mail: mani@junis.ni.ac.yu

Introduction

The most common eating disorders are: anorexia nervosa (F50), i.e., a neurotic loss of appetite, and bulimia nervosa (F50), i.e., neurotic overeating. According to The International Classification of Diseases and Related Health Problems 10th Revision (1), there are also other types of eating disorders diagnosed as: food avoidance emotional disorder-FAED, selective eating, restrictive eating, functional dysphagia, pervasive refusal, and loss of appetite caused by depression. Furthermore, there is another group of eating disorders which are not characterised by malnutrition: binge-eating disorder, compulsive overeating, hyperphagia, excessive eating caused by an organic desease.

On the whole, the prevalence rate of eating disorders is relatively low (<1%). However, from the 70s onward, there is a constant increase in numbers (2). Eating disorders, although typical of highly developed countries, are now becoming

increasingly prevalent even in less developed and developing countries. This is considered to be a consequence of globalisation - the acquisition of the so-called global cultural standards, ways of life as well as nutritional habits (3, 4).

In a multidisciplinary approach of the above mentioned illnesses, which are primarily psychiatric, depending on the clinical symptoms and a degree of malnutrition, a diet therapy could be of paramount importance for the patient's recovery, and sometimes, even, for the prevention of fatal consequences.

Aims

The aim of this paper was to recapitulate clinical evidence which shows the importance of medical nutrition therapy in the treatment of eating disorders.

Material and methods

The research methods have entailed a thorough exploration of literature available at research data bases (Medline, Scopus, etc). The key words used in the research of data bases are: eating disorders, diet, medical nutrition therapy, malnutrition. The facts presented in this paper have been selected by the following criteria: importance for clinical practice, relevance to contemporary life, practical use.

50 www.medfak.ni.ac.rs/amm

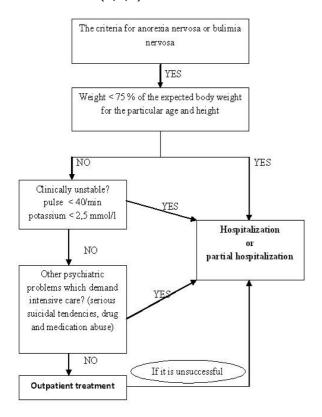
Results and Discussion

Due to the fact that eating disorders are caused by various biological and psychological factors, it is essential that a multidisciplinary team should be involved in the treatment. Except psychiatrists, this team should include other medical specialists such as nutrition experts (dietitians or dietologists), physiotherapists, other medical workers as well as the patient's parents (Chart 1, Draft 1).

Table 1. Basic steps in the treatment of patients with eating disorders

Creating a therapeutic bond between the patient and the therapist
Informing and counseling the family; encouraging the family to accept responsibility
Evaluating the need for hospitalization
Assessment of the nutritional status
Restoring the healthy patterns of nutritional behavior
Cognitive behavioral therapy
Psychodynamic therapy
Group therapy
Physical therapy
Medication

Eating disorders often result in malnutrition. Malnutrition leads to deterioration in the general state of the patient's health, and, in some cases, it can be fatal (5,6,7).



Draft 1. An algorithm for basic treatment decisions regarding patients with anorexia nervosa or bulimia nervosa (according to the American Psychiatric Association)

A special diet program is meant to reinforce the psychiatric treatment of eating disorders. When anorexia nervosa is concerned, the patient receives a diet therapy in order to restore the normal nutritional habits and thus reach and maintain healthy body weight. When bulimia nervosa is concerned, a diet therapy is applied in order to terminate the process of binge-eating. The purpose is, firstly, to cleanse the body through acquiring a normal eating behavior; secondly, it is necessary in order to change the patient attitude to food, nutrition in general, and their own body

For the successful treatment of eating disorders, it is highly important to make a connection based on a "thin but healthy" principle, first with parents, then with patients themselves. Younger patients are not often prone to cooperate, especially because they feel fear and aversion. On the other hand, patients suffering from bulimia nervosa and selective eating concede to a therapeutic bond more easily (6).

Providing relevant information on the nature of the illness is of vital importance for the final success of the treatment. The close family members of the patient must be well informed about the nature of the illness, its course, complications and the recommended therapy program. After the patient is examined and the illness diagnosed, the doctor talks both to the patient and his parents and gives details about the nature of the illness, potential risks. Then, he points out the need for teamwork. Also, it is desirable to supply the parents with printed material.

The fact is that the patient himself cannot take care of his own health and nutrition; therefore, his parents are to take responsibility for and control over his diet. However, this does not relate to other aspects of the patient's life, his choice of hobbies, clothes, friends. As the treatment progresses, the patient gradually regains control over his own nutrition. Through this "try-and-fail" process the patient takes full responsibility for his eating behavior.

The patient suffering from anorexia nervosa becomes angry and infuriated even at the slightest interference into his diet. Therefore, it is important to have his consent as to the course of the treatment in advance. Also, there is clear evidence of a family-oriented therapy having beneficial effects (8).

Before the appropriate diet program is prescribed, it is important to make an assessment of the patient's nutritional status. In this case, there is no point in determining the desirable body weight since the patient's ideals are always below the standard.

The assessment of the patient's nutritional status determines whether the patient should be hospitalized or not. In this case, the following factors are taken into account: the mental state of the patient, anxiety of the parents, whether outpatient treatment allows for certain therapy programs (Chart 2).

On the one hand, patients suffering from anorexia nervosa are most often in need of hospital

treatment, while, on the other, patients suffering from selective eating are rarely hospitalized.

Table 2. Criteria for hospitalization of patients with eating disorders

Body mass index below $15\ \text{kg/m}^2$ or relative body weight below 75% or below the 3rd percentile in children under 18

Dehvdration

Circulatory collapse, manifested in low blood pressure, slow or irregular pulse, bad peripheral circulation

Electrolyte deficiency

Recurrent vomiting and blood in the vomit

Depression, suicidal ideas or intensions, or other more serious psychiatric disorders

Unsuccessful outpatient treatment

Recovering the lost fluid and electrolyte balance, if recommended, demands inpatient hospital care. Stationary health centers hold a supreme position because of the fact that they detect and treat complications rapidly; also, they provide better conditions for enteral nutrition. For younger patients, as well as their parents, admission into children's ward is less stressful than admission into psychiatric ward. The compromise can be made between inpatient hospital care and outpatient services. Besides, outpatient clinics turn out to be very efficient in the treatment of adult patients.

In the treatment of eating disorders, a diet therapy is applied with an aim to restore a healthy diet, that is, good nutritional habits. The return to a normal diet can be either rapid or gradual. The former program (rapid) should be applied to patients without considerable reduction in weight, those taken ill recently, and the ones treated as outpatients. On the other hand, patents with considerable and continuous decrease in weight are rehabilitated through a gradual nutrition therapy (9).

Adequate nutrition can be provided in three ways: oral, enteral and sometimes parenteral nutrition (10). If the patient's state of health requires the level of essential nutrients be increased immediately, enteral nutrition is applied. A dietitian, together with hospital medical stuff, applies enteral nutrition through a nasogastric tube. On the other hand, parenteral nutrition is used in order for the patient to recover the lost fluid and electrolyte balance. This is an alternative method used when it is impossible to apply either oral or enteral nutrition.

A dietitian has an essential role in the medical team for the treatment of eating disorders. He is a consultant adviser to parents and other team members on the following issues:

- Making a nutrition plan according to the individual's nutrition needs.
- Monitoring the gradual increase in food intake.
- Replacing certain food stuffs.
- Specifying the essential nutrients.
- Making recommendations for dietary supplements.

The patient, his parents and dietitian should all reach an agreement on the recommended diet

program. It would be wrong to make an agreement only with the patient, especially if he is a youth, because he can show a great manipulative potential. Therefore, it is important to stress that the parents take ultimate responsibility for the choice of a diet.

Nutritional rehabilitation includes: the assessment of nutritional habits and nutritional status, diet therapy, and nutritional counseling.

Nutritional assessment implies taking the diet history and the assessment of the biochemical, metabolic and anthropometric indicators of his nutritional status.

The diet history should include the assessment of the energy intake, the intake of macro and micronutrients, the patient's attitude to eating behavior and eating in general. Anorexia nervosa is characterized by lower energy intake below 1000kcal per day. Bulimia is, in turn, very difficult to follow in terms of energy intake because of the 'purging' phases, that is, selfinduced vomiting (11). Namely, when they are not in the binge phase, patients suffering from bulimia often avoid food with carbohydrates and fats. Therefore, inadequate energy intake and limited choice of food cause malnutrition. When the medical history of nutrition is recorded, a doctor should pay attention as to how much fluids have been taken usually. On the one hand, some patients drink fluids rarely because they feel bloated afterwards; on the other hand, some others drink large quantities of fluids to ward off the feeling of hunger.

Patients with eating disorders have typical attitudes and types of nutritional behavior.

They avoid red meat, pastry, sweets, meat and roasted food. They often classify certain types of food as 'absolutely good' or 'absolutely bad'. They perform rituals at the table. They have their own ways of eating, of combining different food or/and they use spices excessively. Not only should these rituals be noted but also the duration of the meal itself. The patient suffering from bulimia devour food rapidly, with an insatiable appetite, whereas, patients suffering from anorexia eat slowly and spend much more time. A bulimic will often avoid certain types of food because he believes they could trigger off the binge episodes (12).

In anorexia nervosa the level of serum albumin is usually normal. Despite the fact that patients avoid food with fat and cholesterol, the level of cholesterol in the serum is elevated. Also, there is an imbalance between lipoproteins primarily because of liver dysfunction (13,14). Bulimics also have abnormal levels of lipids in their blood, and the low level of glucose in the serum especially because of the deficient precursors in gluconeogenesis (15). Hypercarotenemia is often found in anorexics. Vitamin deficiency is often found in patients suffering from malnutrition. On the other hand, eating disorders rarely cause anemia. It can occur only as a result of bleeding from the ruptures in the digestive tract. In anorexia the organic need for iron is lower because of amenorrhea on the one hand and the catabolic state on the other. Also,

deficiency in zinc, calcium, magnesium and vitamin D is possible. Vomiting and laxatives can cause a serious imbalance between fluids and electrolytes. Dehydration, hypokalemia, hypochloremia are likely to happen; hyponatremia happens less frequently.

The anthropometric assessment of the nutritional status implies determining the body fat percentage, that is, lean body mass. In the clinical practice the body fat percentage is calculated by measuring the average thickness of four skin folds (biceps, triceps, subscapular and suprailiac). In practice, lean body mass could be calculated by measuring the circumference of the upper arm muscle, that is, by measuring the circumference of biceps and the skin fold of triceps, and by comparing these measurements with the standard values for the particular age and sex. The anthropometric measures should be done at the beginning and during the nutritional rehabilitation of the patient with an eating disorder. A patient with anorexia nervosa is under constant surveillance so that a desired result - the increase in body weight - could be noted. In the treatment of bulimia, however, the short-term goal is to maintain body weight (16).

In cases of malnutrition, it is essential that a patient suffering from an eating disorder should gradually increase the overall calorie intake. The initial diet implies only 1000 kcal per day. A few days later, the calorie intake could imply 200 kcal more per week. It is possible to start with 1200-1500 kcal per day and take in 500 kcal more every fourth day. Thus, the increase in body weight is about 0.5-1 kg per week. The maximum increase should reach 3500 kcal for women and 4000 kcal for men (17).

Slight malnutrition demands small but frequent meals, as well as the use of spices which stimulate the appetite. It is recommended to take in substances with high energetic density such as juices, dried and stone fruit, as well as highly energetic drinks. The meals should have eye appeal to stimulate the appetite and the appropriate nutritional behavior. After the meal, the patient is required to be lying in bed in a warm room for a half an hour.

Severe cases of malnutrition demand digestible, light, small and frequent meals (8-10), skimmed milk (100 ml) with an addition of 10-15g of skimmed powdered milk. Thus, the patient takes in about 1 liter of milk. If the patient is too weak, milk is dissolved.

In further stages, sugar, starch, yoghurt, mashed food, soups and boiled meat are added. The patient gradually returns to a diet which is diverse in ingredients, and high in calories. It should be emphasized that the patient is less tolerant when it comes to fatty food (18).

It is recommended that anorexics and bulimics should include legumes in their diet. These patients often have problems with glucose levels because they consume simple sugars most frequently. Therefore, these patients often suffer from cyclothymia, that is, a mood disorder.

Highly energetic drinks are very useful as dietary supplements since they provide the necessary calories. As the therapy progresses,

the calorie intake decreases, and supplemented drinks could be replaced with usual drinks. However, a potential problem could arise. The patient might continue to use supplemented drinks more often than solid food. So, he might follow the diet regime intended for weight reduction, even after his recovery.

Bitter plants have always been used for appetite stimulation in case the patient is aware of his problem; if he wants to change his eating behavior, he needs to regain the feeling of hunger and appetite. The plants which are often used are: Acorus calamus-Sweet Flag, Cnicus benedictus-Blessed Thistle, Taraxacum offinale-Dandelion, Hypericum perforatum-St. John's wort. Yet, the effect of these stimulators is questionable.

Careful clinical observation is necessary during the diet therapy. It is important to detect vital indicators which show cardiopulmonary function and to detect peripheral edemas. The refeeding syndrome appears in 6% of the hospitalized patients (19). It causes minor abnormalities (a short lasting edema in the feet) or serious complications which require utmost urgency (prolonged QT interval, hypophosphatemia followed by exhaustion, confusion and progressive neuromuscular dysfunction). This syndrome appears most often in patients who have less than 70 % of the ideal body weight, and in those receiving enteral and parenteral nutrition. Also, it can appear in patients who devour food rapidly. Slower nutrition means a lower risk of complications. The level of electrolytes in the serum (especially phosphorus and magnesium), and kidney function should be carefully noted. The clinical changes and laboratory results which demand utmost urgency are: changed perception, tachycardia, congestive heart insufficiency, atypical abdominal pain, prolonged QT interval, QT dispersion (indicator of abnormal ventricular repolarization followed by the risk of arrhythmias, potassium below 3 mmol/l in the serum and phosphorus below 0,8 mmol/l.

The evidence shows that many patients with eating disorders have deficiency in oligoelements and minerals. However, except for zinc (20), there are only a few detailed studies of that field so far. The used supplements are: zinc, calcium, magnesium, iron, vitamins and minerals. Use of fortified foods is recommended (21).

The treatment of complications depends on clinical experience. Peripheral edemas are treated by elevating the legs and restricting the salt intake (22).

It might be very beneficial to include the parents in the treatment (23). Careful planning and cooperation between people who arrange meals, parents and the patient is very important. (Who brings the meals? Who is supposed to be present during the meal? How is the time structured during the meal?)

The ultimate goal of every meal is to have an individual diet program. The dietitian should be consulted as to the energy value of the meal. Since these patients are made furious quite easily, it is important to have a balanced attitude during the meal: firmness and consistence, on one hand, and empathy and flexibility on the other. During the meal, the patient is often nervous and annoyed, and he often leaves the table. Although it is necessary to be committed to the course of the treatment, some compromises are possible to make. For example, it is possible to change a dining room, to replace one type of food with another, to change the objective of the meal. This kind of approach shows concern for the patient. The objectives are agreed on in advance. The patient can be asked only to touch the food with his lips or he can be asked to take in 34 of the meal. The patient should be observed during and immediately after the meal in case he hides and removes the food. The food can be hidden under his clothes, under the table or simply spread on the table to appear partly consumed.

The patient needs to be encouraged in a specific way. This rule applies to every patient who suffers from an eating disorder. One part of the patient's character wants to have a strict control over his nutrition, while the other part wants the healthy eating behavior and normal life back. The patient should be encouraged to resist that part which manifests itself in eating disorders. Some patients need direct verbal encouragement, other subjects for discussion, or the presence of other people, especially pears. Parents and medical workers should cooperate and they should solve any problem related to the patient's nutrition and his attitude to meals at the table. Lack of cooperation makes a negative impact on the patient's recovery (24,25).

The premature feeling of satiated appetite, slight abdominal bloating, or nausea occur frequently. They occur because the food exits the stomach later than usual. So, it is required to have small, frequent and moderate meals. Such meals are intended to reduce anxiety as well, since anorexics often perceive portions to be larger than they actually are. The patient should participate in making a nutrition plan and, to some degree, in the selection of food. It is not recommended to talk about calories but only about healthy nutrition in general. A diet list, which specifies the size of the portion, could be handed to the patient, but not the number of calories.

Breakfast should be served between 7 and 8 a.m.; it includes 1.5 dl of yoghurt, sandwich, a glass of orange juice, a cup of coffee/tea. A month later, the patient is encouraged to add one sandwich to the list; but, he is allowed to eat two sandwiches at the most. Lunch is served between 11.30 and 12.30. Dinner is served between 4.30

and 5.30 p.m. and it is of the same size as lunch. Every meal is finished by taking a supplement for enteral nutrition (nutridrink, for example), which is removed before the end of the treatment. Simple meals are added between the regular ones. Four months later, the patients are allowed to eat together, they can eat in restaurants in the company of a medical worker or a familiar person. After every meal, the patients have a rest in a room with the maximal temperature of 40 'C (26).

Patients who receive enteral nutrition should sit together with the rest of the patients in order to witness the proceedings at the table and to start eating independently when they are ready. A bolus of supplemented milk is given after the meal as an encouragement for dining at the table. It has an advantage over the constant intake because it simulates the normal eating habits and the reappearance of normal appetite and hunger. The use of nasogastric tube is reconsidered every day; as oral nutrition becomes more frequent, enteral nutrition is applied rarely (24).

The meals must be adapted to every patient independently. Since there is not a single, unique approach in the treatment of eating disorders, the meals have to be under constant surveillance. A multidisciplinary team should discuss the applied approach continuously (27).

Conclusion

The nature of eating disorders and frequent instances of malnutrition demand that a diet therapy should be a necessary step in the treatment.

The purpose of a diet therapy is for the patient to accomplish normal body weight and to recover the healthy patterns of eating behavior. There are two possible ways: to return to normal diet immediately or, in severe cases of malnutrition, to recover gradually through a specific therapy program.

If oral nutrition is impossible or the patient refuses to take food orally, enteral nutrition is applied. To stimulate the normal eating patterns a bolus of food is given during the meal in the daytime or at night. Parenteral nutrition is applied rarely, in states of urgency, to recover the electrolyte and fluid balance.

Meals are arranged by doctors, nurses, dietitians, and the family members so as to have the patient under constant surveillance. The objective is set for every meal.

Recovering the normal body weight is a good prognostic factor for patients suffering from eating disorders.

References

- 1. International Statistical Classification of Dieseases and Related Health Problems, Tenth Revision. Vol. 1, WHO, 1992, Geneva.
- Hoek HW, van Hoeken D. Review of the prevalence and incidence of eating disorders. Int J Eat Disord 2003;34:383-96.
- 3. Pokrajac-Bulian A, Zivcić-Becirević I, Calugi S, Dalle Grave R. School prevention program for eating disorders in Croatia: a controlled study with six months of follow-up. Eat Weight Disord 2006;11(4):171-8.
- Vander Wal JS, Gibbons LJ, del Pilar Grazioso M. The sociocultural model of eating disorder development: Application to a Guatemalan sample. Eating Behaviors 2008; 9(3):277-84.
- Norman K, Pichard C, Lochs H, Pirlich M. Prognostic impact of disease-related malnutrition. Clinical Nutrition 2008; 27(1):5-15.
- Sardesai VM. Introduction to Clinical Nutrition. New
- York : Marcel Dekker, 2003. Nikolić M. Dijetetika. WUS Austria, Niš: Medicinski fakultet u Nišu, 2008.
- Eisler I, Russell DC, Szmukler G., le Grange D, Dodge E. Family and individual therapy in anorexia nervosa-a five-year follow-up. Arch Gen Psychiatry 1997; 54: 1025-30.
- Gowers GS. Treatment of anorexia nervosa in childhood and adolescence. Psychiatry 2005; 4(4):14-7.
- 10. American Dietetic Association. Position of the American Dietetic Association: Nutrition intervention in the treatment of anorexia nervosa, bulimia nervosa, and other eating disorders. J Am Diet Assoc 2006; 106(12):2073-82.
- 11. Practice guidelines for the treatment of patients with eating disorders (revision). American Psychiatric Association Work Group on Eating Disorders, Am J Psychiatry 2000; 157(Suppl 1): 1-39.
- 12. Sedlet KJ. Energy expenditure and the abnormal eating pattern of bulimic: a case report, J Am Diet Assoc 1989; 89(1):74-7.
- 13. Matzkin V, Slobodianik N, Pallaro A, Bello M, Geissler C. Risk factors for cardiovascular disease in patients with anorexia nervosa. Int J Psychiatr Nurs Res 2007; 13(1):1531-45.
- 14. Krízová J, Dolinková M, Lacinová Z, Sulek S, Dolezalová R, Housová J. et al. Adiponectin and resistin gene polymorphisms in patients with anorexia nervosa and obesity and its influence on metabolic phenotype. Physiol Res 2008; 57(4):539-46.

- 15. Sullivan PF, Gendall KA, Bulik CM, Carter FA, Joyce PR. Elevated total cholesterol in bulimia nervosa. Int J Eat Disord 1998; 23(4):425-32.
- 16. Mladenović I, Nikolić M. Difference in anthropometric characteristics and functional abilities active and non active women. Sport Mont 2006;10-11:665-74.
- 17. Mehler PS. Diagnosis and care of patients with anorexia nervosa in primary care settings. Ann Intern Med 2001; 134:1048-59.
- Nikolić M, Mitrović V, Nikić D. Medical nutrition therapy in management of food allergy, Acta Fac Med Naiss 2007; 24 (1):45-50.
- 19. Stanga Z, Bruner A, Leuenberger M, Grimble RF, Shenkin A, Allison SP, Lobo DN. Nutrition in clinical practice-the refeeding syndrome: illustrative cases and guidelines for prevention and treatment. Eur J Clin Nutr 2008; 62(6):687-94.
- 20. Lask B, Fosson A, Rolfe U, Thomas S. Zink deficiency and childhood onset anorexia nervosa. J Clin Psychiatry 1993; 54: 63-6.
- 21. Lazarević K, Nikolić M, Mitrović V. Primena i značaj fortifikacije u prevenciji bolesti izazvanih nedostatkom mikronutrijenata. Srp Arh Celok Lek 2006; (Suppl 2):139-144.
- 22. Gentile MG, Manna GM, Ciceri R, Rodeschini E. Efficacy of inpatient treatment in severely malnourished anorexia nervosa patients. Eat Weight Disord 2008;13(4):191-7.
- 23. Arthuis M, Duché DJ. Diagnosis and treatment of disturbances in eating behavior among adolescents: anorexia nervosa and bulimia nervosa. [Article in French] Bull Acad Natl Med 2002;186(3):699-707.
- 24. Pavlović M. Higijensko dijetetski aspekti poremećaja ponašanja u ishrani. Diplomski rad. Niš: Medicinski fakultet u Nišu, 2008.
- 25. Fernstorm MH, Weltzin TE, Neuberger S, Srinivasagam N, Kaye WH. Twenty-four hour intake in patients with anorexia nervosa and in healthy control subjects. Biol Psychiatry 1994;36:696-702.
- 26. Bergh C, Brodin U, Greger L, Södersten P... Randomized controlled trial of a treatment for anorexia and bulimia nervosa. PNAS 2002: 99(14):9486-91.
- 27. Nikolić M, Gajić I, Stanković N. Uticaj stanja ishranjenosti na kvalitet života, Scr Med 2003; 34(2):81-5.

MEDICINSKA NUTRITIVNA TERAPIJA KOD POREMEĆAJA PONAŠANJA **U ISHRANI**

Maja Nikolić, Miloš Pavlović i Milica M. Vojinović

Poremećaji ponašanja u ishrani zahtevaju multidisciplinaran pristup tokom lečenja, gde svoje mesto nalazi stručnjak za ishranu, pre svega zbog rešavanja često prisutnih malnutricija. Cilj rada bio je da sumira istraživanja i kliničke dokaze o značaju medicinske nutritivne terapije u kontroli poremećaja ponašanja u ishrani, kako bi se dale smernice od značaja za kliničku praksu. Metodologija rada obuhvatila je revijski pregled literature dostupne na istraživačkim bazama podataka. Rezultati do sada publikovanih radova su nedvosmisleno ukazali da je kod poremećaja ponašanja u ishrani dijetoterapija neophodna za postizanje odgovarajuće telesne mase bolesnika i vraćanje normalnih obrazaca ishrane. Neki autori sugerišu prelazak na normalnu ishranu odmah, dok se drugi zalažu za tzv. postepeni program dijetoterapije. Ukoliko je onemogućeno unošenje hrane na usta, primenjuje se enteralna ishrana. Parenteralna ishrana je rezervisana za nadoknadu elektrolita i tečnosti u urgentnim stanjima i treba je ređe primenjivati. Dodavanje telesne mase predstavlja povoljan prognostički faktor za bolesnike sa poremećajima ponašanja u ishrani, te stanje ishranjenosti treba savesno i redovno pratiti. Pravilno propisana i vođena dijetoterapija treba da uđe u obavezan protokol lečenja bolesnika sa poremećajima ponašanja u ishrani i u našoj sredini. Acta Medica Medianae 2009;48(1):50-55.

Ključne reči: poremećaji ponašanja, ishrana, medicinska nutritivna terapija, malnutricija