

Marasmus

Ms. Anupama Rajput

Nursing Tutor, Child Health Nursing Department, Rama College of Nursing, Rama University , Mandhana, Kanpur

Abstract

The purpose of writing this article is to provide the information about Marasmus to the student and health educators, this article signify that how peoples are suffering from this disease due to lack of proper nutrition in the food consumed by the people and get affected by this disease. Marasmus mostly affects the children of undeveloped and developing countries because of Malnutrition and improper diet starvation is also a big threat for making the world Marasmus free. This article tells you how other factors are also responsible to pull many lives into this disease that's why it becomes important to be aware of all the facts. Further talking about these topic readers will introduce by more particulars about the type, cause, symptoms and treatment. Preventive can becomes helpful while treating the disease. A strict and healthy, full of nutrition diet must be followed with medicine or treatment.

Keyword - Marasmus, Protein energy malnutrition, Vitamin, BMI.

Introduction

The term 'protein-energy malnutrition' refers to acute malnutrition as results of an insufficient intake of protein; acute malnutrition is an inadequate weight relative to vertical height. Severe acute malnutrition is further divided into two main categories marasmus and kwashiorkor person with marasmus will lose body mass and fat in their face. Similarly, their bones appear under their skin, and folds of skin develop from the loss of body mass. Their eyes may appear sunken. A child with marasmus can also be very hungry and suck on their clothes or hands as if trying to find something to eat. But some people with marasmus have anorexia nervosa and they are not want or be able to have food. Both adults and youngsters can have marasmus, but it most frequently affects young children in developing countries. It happens when the intake of nutrients and energy is just too low for an individual's needs. It appears in wasting, or the loss of fat and muscle. A child with marasmus might not grow as children usually do.¹

The World Health Organization recognizes the elderly as another population that's susceptible to poor nutrition. Because their nutritional requirement isn't well defined, attempts to supply them with the required nutrition become difficult.

Definition

Marasmus is divided from Greek word 'Marasmos' which means withering or wasting.

“Marasmus is a form of under nutrition caused by insufficient intake of food”.²

“Marasmus is form of sever malnutrition it usually occurs in children of developing countries”.

Causes

Marasmus is caused by the following factors: Maternal malnutrition, Maternal anemia, Parental ignorance, Poverty, Pneumonia, Cyanotic heart diseases, Malaria, Necrotizing enter colitis Pyloric stenosis, Lactose intolerance Intussusception Meningitis, Anorexia Nervosa, Diarrhea, measles, or a respiratory tract infection are serious complications during a child with marasmus.¹

Degree of marasmus

First-degree- malnutrition mild malnutrition that has been current for a short period these teens display a body weight deficit of 10-24%, seconddegree- malnutrition in moderate malnutrition children exhibit a bodyweight deficit of 25-39% these youth regularly require hospitalization, third-degree malnutrition -the nutritional reserves of the body are nearly exhausted the kids weight deficit is increased than 40 %of that predicted for his/her age. Children might also display serious somatic functional and even psychological alterations this circumstance generally requires

hospitalization and has a sturdy have an impact on the kids physiology the mortality fee for this case is a lot greater than in the previous two categories the time period only refers to extreme forms of the disease.

Clinical features

Marasmus is an acute loss of body fat and muscle tissues, resulting in a strangely low body mass index (BMI).³

- Weight loss
- Dehydration
- Chronic diarrhea
- Stomach shrinkage
- Fatigue
- Difficulty staying warm
- a lower body temperature
- Diarrhea
- reduced appetite
- a lack of emotion
- Irritability
- Weakness
- Slower breathing
- Dry skin
- Hair loss
- Bruises

Risk factors

Risk factors for marasmus include: Chronic starvation

Contaminated water, inadequate foods components,

Other diet deficiencies (vitamin A, E or K)

Unbalanced food format lacking in grains, fruits and vegetables, and protein⁴

Growth troubles in kids,

Joint deformity and destruction,

Loss of strength, blindness,

Organ failure or dysfunction,

Unconsciousness and coma.⁵

Treatment

Treatment of marasmus includes a special feeding and ORS plan and shut medical support to stop and manage difficulties of malnutrition. Pediatric nutrition rehabilitation centers are established in some countries and regions to coordinate treatment of malnourished children. Intravenous fluids, oral rehydration solutions, and forced feeding tubes are sorts of treatment which will be used.

There are three phases with regard to treatment: initial phase, rehabilitation phase, follow up phase Initial Phase- This phase occurs within the primary 10 days of treatment. Correct the fluid and electrolyte imbalances by giving rehydration. Any infections must be properly treated. Those vulnerable to infection can succumb to septic shock. In this circumstance, the kid would require immediate intervention with fluid resuscitation to take care of vital sign.⁶

In cases of shock, intravenous (IV) rehydration is suggested employing a Ringer-lactate solution with 5% dextrose or a mix of 0.9% common salt with 5% dextrose. Enteral hydration using Reseal should be started as early as possible, preferably at an equivalent time because the IV solution. the subsequent rules should be implemented within the initial phase of rehydration: use an nasogastric (NG) tube; continue breastfeeding, except just in case of shock or coma; and begin other food after 3-4 hours of rehydration. Rehabilitation Phase-This phase occurs within 26 weeks of treatment when the child is eating well and is no longer malabsorbing. At this point increased protein intake. When starting a diet, it's important to reintroduce foods slowly, as these children are in peril of refeeding syndrome. Calories should be increased gradually. At early stage it is considered that the patient should only take in an extra 25 kcal/kg/day every other day. Vitamins and minerals should be supplemented, as these levels also will be deficient in those with malnutrition. It is also important to possess a multidisciplinary approach, as many will have emotional pain from the malnutrition. Treating infections and the other health issues can assist in giving them the simplest chance of recovery. Children with marasmus face the problem of infection, so treatment must include antibiotics or other medications as standard. Once a toddler starts to recover, they ought to have a more diet that meets their nutritional needs.⁷

Prevention

A diet rich in vitamin E like vegetable oils like cotton seed, soy and safflower oil is additionally recommended to spice up the immunity levels. It is important to ensure that the food being consumed is cooked properly. Breastfeeding mothers should provide their babies with sufficient complementary feedings in the weaning stage. If dehydration is a problem due to diarrhea, fluids are to be given orally or intravenously as required to rehydrate the body. If infections are present antibiotics may be prescribed to enable the patients to recover quickly. A well-balanced diet, full of nutrients with many vegetables, fruits, pulses, grains, Carbohydrates and protein will reduce the danger of marasmus. Good sanitation and hygiene also play an enormous role in spreading disease in developing countries. Poor sanitation and hygiene can cause infections which will cause malnutrition. Foods must be cooked at recommend flame to destroy germs. Water should be boiled before cooking, drinking.⁸

- Early detection of malnutrition and early interventions.
- Growth monitoring
- Integrated health packages must including preventive immunization, oral rehydration, chemoprophylaxis, early diagnosis, periodic deworming and treatment of common illnesses.
- Family planning services.
- Income generation activity.
- Promotion of education and literacy in community.
- Nutrition education to people.
- Provision of food supplements for new born baby children.
- Nutritional surveillance
- Utilization of common salt.
- Nutritional rehabilitation services.⁸

Conclusion

Marasmus is a form of undernutrition caused by inadequate food intake children's do not get sufficient amount of food, specially in developing countries and then face many deficiency like weight loss, dehydration, hair loss, etc. Treatment depends on the condition of Marasmus. If child take balanced diet full of nutrition with many vegetable, fruit, pulses, grains, Carbohydrates and protein will reduce the threat of Marasmus. Good sanitation and personal hygiene also prevent the disease.

Bibliography

- Marlow R.D, Redding A.B. Textbook of pediatric nursing. Elsevier, a division of Reed elsevier India (P) Ltd sixth edition.p.674-5.
- Sharma R. Essential of pediatric nursing. Jaypeebrothers medical publishers, New Delhi, first edition2013p.274.
- Hockenberry J.M, Wilson D. Essential of pediatric nursing Elsevier, a division of Reed elsevier India (P)Ltdeighth edition p.383
- Datta P. Pediatric Nursing jaypee brother's medical publishers (p) Ltd New Delhi second edition p.204.
- www.statpearls.com
- www.medicalnewstoday.com
- www.wikipedia.com
- www.healthline.com

