



Malnutrition and the heart

Malnütrisyon ve kalp

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Malnutrition may lead to cardiovascular diseases such as cardiomyopathy, heart failure, cardiac arrhythmia, and in some cases sudden death during childhood (1–4). In addition, it also has effects on many systems, mainly the immune system. Malnutrition affects cardiovascular health both in childhood and adulthood and may lead to coronary artery disease, hypertension, and diabetes mellitus.

Malnutrition during pregnancy affects the fetus and causes babies to be born ‘small for gestational age.’ In these babies, congenital cardiac anomalies are observed more frequently and the risk for hypertension and cardiovascular diseases is increased at advanced ages (5, 6).

In underdeveloped or developing countries, malnutrition continues to be an important public health problem. In reports published by the World Health Organization (WHO) and the United Nations Children’s Fund (UNICEF) in 2018, it was reported that one out of four children was affected by malnutrition worldwide, and approximately half of all deaths under the age of 5 years were caused by malnutrition and related diseases (7, 8). Institutions including the WHO, UNICEF, and local administrations are conducting numerous studies for the prevention, early diagnosis, and treatment of malnutrition, which develops as a result of many factors including economical, socio-cultural, and geographic factors. We, as pediatricians, have important responsibilities in terms of the prevention, early diagnosis, and treatment of malnutrition. These responsibilities include educating mothers in child nutrition, taking detailed history of nutrition, and early recognition of poverty at home, deprivation of

stimuli/compassion or risks in eating-feeding relationship. Exclusive breastfeeding in the first six months of life, initiation of appropriate complementary feeding, and continuance of breastfeeding until the end of the second year of life, which are defined as ideal nutrition, constitute the main factors in the prevention of malnutrition. In the early diagnosis of malnutrition, it is very important to follow up children at appropriate intervals and evaluate growth. In this way, early diagnosis and treatment of acute and chronic diseases that could lead to malnutrition, will also be possible.

Although healthy nutrition is important at any age in children, it is a known that nutrition, especially in the first 3 years of life (1000 days), affects the morbidity and mortality risk and health status at advanced age (9).

In the research study conducted by Dr. Osman Akdeniz et al. entitled ‘Cardiac Evaluation in Children with Malnutrition,’ which was included in this issue of our journal, reductions in left ventricular contraction and repolarization disorders that might lead to ventricular arrhythmias were shown with echocardiographic and electrocardiographic evaluations in children with malnutrition. We thank our authors for their study, which draws attention to malnutrition.

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