Abstract

Patients with cardiac disease can develop two types of malnutrition: cardiac cachexia, which appears in chronic congestive heart failure, and malnutrition due to the complications of cardiac surgery or any other type of surgery in patients with heart disease. Early enteral nutrition should be attempted if the oral route cannot be used. When cardiac function is severely compromised, enteral nutrition is feasible, but supplementation with parenteral nutrition is sometimes required. Sustained hyperglycemia in the first 24 hours in patients admitted for acute coronary syndrome, whether diabetic or not, is a poor prognostic factor for 30-day mortality. In critically-ill cardiac patients with stable hemodynamic failure, nutritional support of 20-25 kcal/kg/day is effective in maintaining adequate nutritional status. Protein intake should be 1.2-1.5 g/kg/day. Routine polymeric or high protein formulae should be used, according to the patient's prior nutritional status, with sodium and volume restriction according to the patient's clinical situation. The major energy source for myocytes is glutamine, through conversion to glutamate, which also protects the myocardial cell from ischemia in critical situations. Administration of 1 g/day of omega-3 (EPA+DHA) in the form of fish oil can prevent sudden death in the treatment of acute coronary syndrome and can also help to reduce hospital admission for cardiovascular events in patients with chronic heart failure.

Keywords

Critically-ill cardiac patient, Cardiac cachexia, Omega-3 fatty acids, Hyperglycemia.