Abstract

Background: Parenteral nutrition (PN) is used to control the nutritional state after severe intestinal resections. Whenever possible, enteral nutrition (EN) is used to promote intestinal rehabilitation and reduce PN dependency. Our aim is to verify whether EN + oral intake (OI) in severe short bowel syndrome (SBS) surgical adult patients can maintain adequate nutritional status in the long term. Methods: This longitudinal retrospective study included 10 patients followed for 7 post-operative years. Body mass index (BMI), percentage of involuntary loss of usual body weight (UWL), free fat mass (FFM), and fat mass (FM) composition assessed by bioelectric impedance, and laboratory tests were evaluated at 6, 12, 24, 36, 48, 60, 72, and 84 months after surgery. Energy and protein offered in HPN and at long term by HEN+ oral intake (OI), was evaluated at the same periods. The statistical model of generalized estimating equations with p < 0.05 was used. Results: With long term EN + OI there was a progressive increase in the UWL, a decrease in BMI, FFM, and FM (p < 0.05). PN weaning was possible in eight patients. Infection due to central venous catheter (CVC) contamination was the most common complication (1.2 episodes CVC/patient/year). There was an increase in energy and protein intake supply provided by HEN+OI (p < 0.05). All patients survived for at least 2 years, seven for 5 years and six for 7 years of follow-up. Conclusions: In the long term SBS surgical adult patients fed with HEN+OI couldn’t maintain adequate nutritional status with loss of FM and FFM.

Keywords

Short bowel syndrome, Long-term nutritional outcome, Home parenteral nutrition, Home enteral nutrition, Oral intake.