Preemptive Cautions Prior to Final Intestinal Transplantation: Four Golden Criteria in Predicting the Outcome and Long-Term Survival of Short Bowel Syndrome: Is the Remaining Bowel Length is at or above 50 Cm? Can Patient Survive Over 24 Months in spite of any Complications? Younger Age? and Lesser Accompanying Co-Morbidity?

Ethem Unal, MD*

Associate Professor of Surgery, Department of General Surgery, Umraniye Training and Research Hospital, Health Sciences University, Turkey

*Corresponding author: Dr. Ethem Unal, MD, Associate Professor of Surgery, Department of General Surgery, Umraniye Training and Research Hospital, Health Sciences University, Turkey

Introduction

The principal aim at the initial surgery is to preserve life, then to preserve gut length, and maintain its continuity. In the immediate postoperative period, there needs to be a balance between keeping the patient alive through the use of total parenteral nutrition (TPN) and antisecretory agents, and promoting gut adaptation with the use of oral nutrition. If following this, the patient still has a short bowel syndrome (SBS), then the principal options remain either long term TPN, or intestinal transplantation which remains a difficult and challenging procedure. The purpose of this study is to determine the most important factors affecting morbidity and mortality during follow-up of SBS.

Methods

Twenty-one adult patients with SBS identified from 2000 to 2016 in our clinic were reviewed. Patients with SBS who died in the intensive care unit in early postoperative period were excluded. Follow-up period was 96 months (range, 6-168 months). Morbidity and mortality rates of the patients were determined on the base of the length of the remaining small bowel (RSB) segment, and the factors affecting the final outcome of SBS were correlated.

Results

There were 9 men and 12 women, and the mean age was 56 years (range, 26-78 years). The average period of hospital stay was 41 days (range, 1-184). Three of elderly patients (mean age 72 years) with SBS died in the first months after surgery due to metastatic carcinoma, severe cardiac insufficiency and chronic renal failure. These patients were determined to have RSB below 50 cm. Of the remaining 18 patients, two (11%), with RSB below 50 cm, underwent intestinal transplantation due to early TPN failure. One of them died just after transplantation, and the other survived 12 months. Three patients, with RSB below 50 cm, died of sepsis, after multi-admissions (mean, 4) to the hospital. They survived 22 months in average (range, 18-27 months). One patient with RSB below 50 cm also died of hepatic failure at postoperative month 23. There was no mortality due to metabolic complications during TPN treatment, as all patients monitored closely both at home and in...
the hospital. Eight patients (38%) weaned off TPN (two with RSB below 50 cm). The overall survival rate in our series was 52%.

Conclusion

RSB above 50 cm, younger age, lesser comorbidities, and a meticulous care with close follow-up in the first 24 months are the golden keys in the success of SBS treatment [1-4].

References