The most recent outcomes on bowel transplantation (BT), with a survival rate immediately after transplant higher than 80% and a great rate of survivors achieving complete digestive autonomy and able to carry out activities according to their age allow for considering BT as the first choice therapy in patients with irreversible intestinal failure in whom poor prognosis with parenteral nutrition is foreseen. Parenteral nutrition-associated liver damage is the most frequent indication for BT, especially in children that are more susceptible than adults to develop this complication. Other accepted indications for BT are irreversible intestinal failure in association with loss of deep venous accesses, life-threatening severe infections associated with the use of central catheters, and those cases of intestinal failure usually leading to early death, such as ultra-short bowel syndromes, refractory diarrheas, and intestinal failure associated to high morbidity and poor quality of life. BT is performed in human clinical practice under three technical modalities: isolated bowel transplant, combined liver-bowel transplant, and multi-visceral transplantation. Currently, refinements of original techniques including reduction of liver and/or intestinal grafts, grafts from living donors, etc., allow for overcoming the different needs as well as increasing the likelihood of having access to transplantation, which is a desirable goal specially in very young or very low-weighted children candidate to liver-bowel transplant. One of the most interesting issues in BT programs is having given access to the Intestinal Rehabilitation Units, which comprise the three therapeutic modalities by means of a multidisciplinary team: nutritional support, pharmacotherapy, and surgery. These Units optimize the outcomes, minimize costs, and allow for offering a management adapted to individual needs.

Keywords
Bowel transplant, Intestinal failure, Short bowel syndrome.