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LETTER TO THE EDITOR

Intestine transplantation: case report

Transplante de intestino: relato de caso

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Intestine transplantation (ITx) is one of the greatest challenges in modern medicine. It is a very sophisticated procedure that can be performed isolated or combined with other organs of the gastrointestinal tract, such as stomach, duodenum, liver and pâncreas in a multivisceral transplantation. Primary indications for ITx mainly involves patients with Short Bowel Syndrome (SBC) complications, such as depletion of central venous access caused by thrombosis or multiple episodes of catheter related infections due to parenteral nutrition, alterations of growth and development in children, liver disease and refractory electrolyte changes^{1-4,7}. In adults, SBC is generally caused by Crohn disease, mesenteric thrombosis, trauma, desmoid tumors and complications from gastrointestinal surgeries. In Children, the main causes are congenital anomalies, mid gut volvulus, gastroschisis, intestinal atresia, necrotizing enterocolitis and motility disorders⁵⁻⁶.

In Brazil and around the World, the development of ITx has been slow and the number of patients who undergo this procedure is much lower than other solid organ transplantations. One of the main causes for this difference is the lack of knowledge about

immunosuppressive therapy, which generally leads to graft rejection. Studies have shown that 50%-75% of ITx patients experience acute rejection, while 15% experience chronic rejection⁴. The lack of centers specialized in ITx is another issue. In Brazil, there is just two centers (HCFMUSP and HIAE) currently performing intestinal transplantation and the casuistic is incipiente (just 10 cases), which makes the experience in this procedure and in the immunosuppressive therapy quite limited.

Considering the importance of studying a great number of ITx cases to develop this procedure in Brazil, we report a case of intestine transplantation that has evolved with emergency removal of the graft due to acute rejection and failure of the clinical treatment in HCFMUSP.

The patient is a 21 years old male who developed Short Bowel Syndrome after complications from a appendectomy in 2015. He was indicated and undergone ITx in 2016 due to several catheter related infections. Six months after the procedure, the patient started to have complications from immunosuppressive theraphy, when he was successfully treated for systemic histoplasmosis.

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At the 18th postoperative month, he was admitted with fever and intense diarrhea. Image and laboratory exames were consistent with severe acute rejection and the patient was unsuccessfully treated with high doses of immunosuppressive medications. A few days later,

his clinical condition worsened, which leaded to the urgent removal of the transplanted graft. The patient's general condition improved and parenteral nutrition was reintroduced.

REFFERENCES

- 1. Lacaille F. Thirty years after the first intestinal transplantation in 1987: which indications are left in 2018? Curr Opin Organ Transplant. 2018;23:196-8. doi: 10.1097/MOT.00000000000000511.
- American Gastroenterological Association. American Gastroenterological Association medical position statement: short bowel syndrome and intestinal transplantation. Gastroenterology 2003; 124:1105. doi: 10.1053/gast.2003.50139.
- Selvaggi G, Gyamfi A, Kato T, Gelman B, Aggarwal S, Begliomini B, Bennett J, Nishida S, Tzakis AG. Analysis of vascular access in intestinal transplant recipients using the Miami classification from the VIIIth International Small Bowel Transplant Symposium. Transplantation 2005; 79:1639-43. doi: 10.1097/01.TP.0000164317.38855.60.
- Gürkan Alp. Advances in small bowel transplantation. Turk J Surg. 2017;33:135-41. doi: 10.5152/turkjsurg.2017.3544.
- Todo S, Reyes J, Furukawa H, Abu-Elmagd K, Lee RG, Tzakis A, Rao AS, Starzl TE. Outcome analysis of 71 clinical intestinal transplantations. Ann Surg. 1995;222:270-2. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC1234805/.
- 6. Reyes JD. Intestinal transplantation. Semin Pediatr Surg 2006;15:228-34. doi: 10.1053/j.sempedsurg.2006.03.010.
- 7. Gotthardt DN, Gauss A, Zech U, Mehrabi A, Weiss KH, Sauer P, et al. Indications for intestinal transplantation: recognizing the scope and limits of total parenteral nutrition. Clin Transplant. 2013;27(Suppl 25):49-55. doi: 10.1111/ctr.12161.

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