

Intestinal Rehabilitation and Intestinal Transplant Programs



Cincinnati Children's Hospital Medical Center provides comprehensive, multidisciplinary care for children with complex intestinal disorders leading to short bowel syndrome and intestinal failure. Our specialists care for patients from around the United States, and have a strong reputation for innovation and outcomes-driven treatment protocols.

CONTACT US

For patient referrals and non-urgent consultation during business hours, contact the programs directly at:

Intestinal Rehab:

phone: **513-636-6155**
email: ir@cchmc.org

Intestinal Transplant:

phone: **513-636-4955**

TREATMENT TEAM

Conrad R. Cole, MD, MPH, MSc
Medical Director, Intestinal Rehabilitation Program

Paul W. Wales, MD, MSc, FRCSC, FACS, FASPEN
Surgical Director, Intestinal Rehabilitation Program

Samuel A. Kocoshis, MD
Medical Director, Intestinal Transplant Program

Greg M. Tiao, MD
Surgical Director, Intestinal Transplant Program

Stephanie Bachi DeCastro Oliveira, MD
Gastroenterologist

Michael Rogers, DO
Gastroenterologist

Alexander Bondoc, MD
Pediatric Surgeon

Michael Helmrath, MD, MS
Director of Surgical Research

HOW WE'RE DIFFERENT

Patients receive care from a multidisciplinary team that includes gastroenterologists, neonatologists, pediatric surgeons, clinical psychologists, dietitians, rehabilitation therapists, speech-language pathologists (feeding specialists), nurse coordinators and social workers.

The team's innovative medical and surgical interventions lead to a high success rate of weaning patients off total parenteral nutrition (TPN). Medical interventions include:

- The use of ethanol lock and adjunct therapy, individualized education protocols and event analysis to prevent catheter-associated bloodstream infection rate in our patients on home parenteral nutrition
- Utilizing lipid-sparing protocols, IV fish-oil-based lipids and combination lipid emulsions
- Innovative therapeutic options including Teduglutide and unique surgical procedures
- Clinical trials using modified growth factors including longer acting GLP2 analog
- Unique surgical procedures to promote adaptation

Intestinal transplant surgery may be offered when all other treatment strategies have failed. A pediatric gastroenterologist and transplant surgeon lead the transplant team, collaborating with nephrologists, pulmonologists, cardiologists and other providers to address each patient's unique needs.

CONDITIONS TREATED

Our team cares for children with short bowel syndrome and intestinal failure resulting from the following intestinal disorders:

- Autoimmune bowel disease
- Congenital diarrheal disorders
- Gastroschisis
- Hirschsprung's disease
- Intestinal atresia
- Malabsorption diseases and disorders
- Malrotation
- Motility disorders
- Necrotizing enterocolitis
- Omphalocele-extrophy-imperforate-anus-spina bifida (OEIS)
- Pseudo-obstruction
- Short gut syndrome
- Complications related to small bowel transplantation
- Total parenteral nutrition-induced liver disease
- Volvulus

312

Patients seen in 2021



Patients traveled from **22 states** and **3 countries** in 2021

99%

of Intestinal Rehabilitation patients on chronic home parenteral nutrition with a direct bilirubin of less than 2 mg/dL in 2021

1.5/1,000

In 2021, our at home central line associated blood stream infection rate averaged below 1.5 per 1,000 catheter days

58

Isolated small bowel and small bowel/liver/pancreas transplants since 2003



Cincinnati Children's is ranked #1 in Gastroenterology & GI Surgery and #3 in the nation among Honor Roll hospitals.

TREATMENT APPROACH

The team offers families comprehensive treatment recommendations and extensive training to help them manage their child's long-term medical needs. We train caregivers to recognize signs of distress, establish IV access and manage other aspects of home care. The goal is to reduce the patient's need for hospitalization and frequent clinic visits, and improve quality of life. Also, we work closely with referring teams to co-manage patients who travel far from home for care.

INTESTINAL TRANSPLANT PROGRAM

Our surgeons perform state-of-the-art intestinal reconstructive procedures, including bowel lengthening and tapering, in order to preserve bowel function and avoid transplant.

Since 2003, Cincinnati Children's has performed small bowel and small bowel/liver/pancreas transplants, including segmental, in situ split, and transplants for infants weighing as little as 5 kg. Our post-transplant survival rate for patients continues to be above the national average. We are committed to open communication and teamwork, qualities that translate into a thoughtful patient selection process, strong surgical outcomes and careful post-transplant management.

Among our strategies to improve surgical outcomes:

- Placing the patient on the transplant list as quickly as possible
- Initiating pre-transplant therapies to address issues such as frequent bloodstream infections or previously undiagnosed heart disease and renal insufficiency
- After surgery, using rigorous protocols to identify early signs of rejection and organ failure
- Working intensively with home healthcare providers to ensure a safe environment following hospital discharge
- Creating a "patient care passport," an invaluable resource for families and physicians that details all significant clinical events related to the patient's intestinal transplant care

CLINICAL RESEARCH TO IMPROVE PATIENT CARE

Researchers at Cincinnati Children's engage in a variety of national, multi-site research trials and conduct their own clinical studies, with the goal of developing more effective therapies and care protocols for patients with complex intestinal disorders. Areas of research include:

- Nutritional and developmental outcomes of infants with intestinal failure and short bowel syndrome
- Epidemiology of iodine deficiency in intestinal failure
- Intestinal stem cells for mechanisms of epithelial maintenance and relation to physiological conditions and disease state
- Microbiome diversity and secretor status in pediatric intestinal failure
- Absorptive capacity of the small intestine in patients with OEIS
- Quality of life impact on families of children with intestinal failure
- Development of biomarkers for transplant rejection
- The role of intestinal microbiota in acute cellular rejection and development of multidrug-resistant organisms

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link® at 1-888-987-7997.