PRACTICE TOOL

Definitions in Pediatric Intestinal Failure

Standard key terms and definitions for pediatric intestinal failure (PIF) provide clarity to clinical and research reporting and allow for comparison of results, longitudinal evaluation of management methods, and alignment of outcome metrics across studies and centers managing PIF.

Seven key terms and definitions have been delineated by the ASPEN PIF Section (*JPEN* J Parenter Enteral Nutr. 2022 Jan;46(1):42-59). These definitions should be used by clinicians, researchers, policy makers, advocacy associations, and other stakeholders who care for or are associated with pediatric patients with intestinal failure.

Term	Definition
Pediatric intestinal failure	Pediatric intestinal failure is the reduction of functional intestinal mass below that which can sustain life, resulting in dependence on supplemental parenteral support for a minimum of 60 days within a 74 consecutive day interval.
Parenteral support	Parenteral support involves provision of IV fluids in those patients who are unable to maintain full enteral autonomy. These fluids can contain any combination of macronutrients, electrolytes, vitamins, or trace elements. PN, as a subtype of parenteral support, is the IV provision of nutrients in those patients who are unable to adequately supply nutrients to their body by enteral means in order to treat or prevent the development of disease-related malnutrition. It may contain protein, carbohydrate, and/or fat, as well as electrolytes, trace elements, micronutrients, and/or vitamins along with an adequate amount of fluid for hydration, and may provide partial or full estimated needs.
Enteral support	Enteral support involves the provision of sufficient nutrition and fluids through the intestinal tract to facilitate appropriate growth and hydration with or without parenteral support or nutrition. These fluids can contain any combination of macronutrients, micronutrients, or electrolytes. Enteral nutrition, as a subset of enteral support, is the specific provision of macronutrients through the intestinal tract. It may contain protein, carbohydrate, and/or lipid, along with an adequate amount of fluid for hydration, and may provide partial or full estimated needs. The goal of enteral support is to promote intestinal adaptation, enhance the ability to wean PN, aid in the prevention of cholestasis, limit morbidity and mortality by promoting enteral autonomy, and promote developmentally appropriate oral feeding skills.
Enteral autonomy	Enteral autonomy is the maintenance of normal growth and hydration status by means of enteral support without the use of parenteral support for a period of >3 consecutive months.
SIBO	SIBO is objectively defined as: • an excess of bacteria >10^5 CFU/ml in duodenojejunal aspirate fluid (>10^3 CFU/ml if species identified are normally present in the colon; that is, gram negatives, enterococci, anaerobes), OR • a glucose or lactose hydrogen breath test with either double peak or a peak of >20 parts per million hydrogen above basal within 90 min of lactulose ingestion. In the absence of objective data, symptoms such as abdominal pain, bloating, diarrhea, or flatulence that respond to a course of empiric antibiotic therapy can be used.
IFALD	IFALD describes liver injury, as manifested by cholestasis, steatosis, and fibrosis, in patients with intestinal failure that is independent of, or in addition to, other potential etiologies. The development of IFALD is multifactorial, typically as a consequence of metabolic abnormalities in intestinal failure and the medical and surgical management strategies of intestinal failure themselves. It can be stabilized or reversed with appropriate early modification of management strategies and promotion of intestinal adaptation or it can progress to hepatic dysfunction and end-stage liver disease.
IRP	An IRP is an interdisciplinary, collaborative patient care paradigm that serves to coordinate care for children with intestinal failure through comprehensive management of their specialized nutrition and corollary needs, attention to and support for associated chronic comorbidities, and evaluation and treatment of acute complications.

Abbreviations: CFU, colony-forming unit; IFALD, intestinal failure–associated liver disease; IRP, intestinal rehabilitation program; IV, intravenous; PN, parenteral nutrition; SIBO, small-intestinal bacterial overgrowth.

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