AB021. SOH24AB_125. Outcomes of children with intestinal failure secondary to gastrointestinal dysmotility

Johann-Christoph Licht[1,2], Christina Belza[2,3], Yaron Avitzur[2,3,4], Paul Wales[5]

[1]School of Medicine, University of Limerick, Castletroy, Limerick, Ireland; [2]Research Institute, Hospital for Sick Children, University of Toronto, Toronto, ON, Canada; [3]Group for Improvement of Intestinal Function and Treatment (GIFT), The Hospital for Sick Children, Toronto, ON, Canada; [4]Transplant and Regenerative Medicine Centre, The Hospital for Sick Children, Toronto, ON, Canada; [5]Cincinnati Children's Hospital, Medical Center & The University of Cincinnati, Cincinnati, OH, USA

Background: The primary objective of our study is to determine the characteristics and outcomes of pediatric patients with intestinal failure (IF) secondary to dysmotility.
Methods: This is a retrospective cohort study of all patients managed by a multidisciplinary intestinal rehabilitation program with a diagnosis of IF with gastrointestinal (GI) dysmotility between January 1, 2006 and December 31, 2020 with a minimum one year follow up. Student's *t*-test, Wilcoxon rank sum test, and X^2 were used where appropriate.
Results: Fifty-one patients with intestinal dysmotility [median gestational age of 35 weeks, interquartile range (IQR): 31–37 weeks; 22 males (43%)] were studied. Median birthweight was 2,160 g (IQR: 1,635–2,586 g). Eighty-eight percent achieved enteral autonomy (EA) after a median parenteral nutrition duration of 150.5 days (IQR: 93.0–206.0 days). Advanced liver disease [conjugated bilirubin (cBili) >100 µmol/L] was seen in 2/51 patients (3.9%), with no patients receiving an intestinal or liver transplant. The case fatality rate was 3/51 (5.9%) but was related to complications of prematurity. Median follow up was 747 days (IQR: 420.5–1,691.5 days). Patients with a congenital short bowel syndrome (SBS) diagnosis (i.e., gastroschisis, necrotizing enterocolitis) had an earlier referral age [75 (IQR: 48–109) *vs.* 868 (IQR: 61–1,286) days] and were more likely to achieve EA (97% *vs.* 64%, P<0.01) compared to those with primary dysmotility (i.e., chronic intestinal pseudo-obstruction).
Conclusions: This cohort study demonstrates significant long-term survival for patients with dysmotility. There were two distinct populations-neonates with a congenital SBS diagnosis and those presenting later with a primary dysmotility. Patients with a congenital diagnosis had transient symptoms and were likely to achieve EA by 6 months.
Keywords: Gastrointestinal dysmotility in children (GI dysmotility in children); intestinal failure (IF); pediatric general surgery; congenital short bowel syndrome (congenital SBS); enteral autonomy (EA)

Acknowledgments

Funding: None.

Footnote

Conflicts of Interest: The authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

doi: 10.21037/map-24-ab021
Cite this abstract as: Licht JC, Belza C, Avitzur Y, Wales P. AB021. SOH24AB_125. Outcomes of children with intestinal failure secondary to gastrointestinal dysmotility. Mesentery Peritoneum 2024;8:AB021.