Publications by ISPGHAN Members in PubMed Indexed Journals

Prasanth K Sobhan

Annals of Pediatric Gastroenterology and Hepatology ISPGHAN (2023): 10.5005/jp-journals-11009-0128

Source: Valamparampil JJ, Sachan D, Shanmugam N, et al. Emergency ABO-incompatible living donor liver transplantation in Wilson disease-induced acute liver failure. Asian J Transfus Sci 2023;17(1):128–130. DOI: 10.4103/ajts.ajts_55_21.

Through this illustrative case report, authors have described the clinical outcome of an emergency ABO incompatible-liver transplantation (ABOI-LT) for an 8-year-old child with Wilson's disease-induced acute liver failure (ALF). They have reported successful outcomes of ABOI-LT in pediatric ALF complicated by rebound rise in antibody titers post-LT, the ineffectiveness of immunoadsorption (IA), effective use of conventional plasmapheresis (CP), and use of a lower dose of rituximab. This case illustrates that IA and CP, in conjunction with adequate immunosuppression, is a viable approach in emergency ABO-ILT in Wilson disease-induced acute liver failure.

Source: Sachan D, Gundrajukuppam DK, Shanmugam N, et al. R2R2 phenotype blood requirements for liver transplantation surgery in a child with multiple Rh antibodies: meeting needs and changing Indian scenario. Glob J Transfus Med 2023; 8:82–85. DOI: 10.4103/gjtm.gjtm_86_22.

Authors have reported the case of an 11-year-old boy with multiple Rh antibodies (anti-C and anti-E) who required rare R2R2 phenotype blood units for liver transplantation, which was mobilized and arranged through multicenter collaboration and support from various centers in North and South India. Through this case report, authors conclude that transfusion needs are unpredictable in liver transplantation surgeries, and transfusion services often need timely identification and arrangement of compatible units. The authors have highlighted the need for setting up a national/zonal database of rare phenotype blood donors to fulfill the blood requirement of needy patients timely.

Source: Menon J, Shanmugam N, Madathil S, et al. Mature Cystic Teratoma of the Gall Bladder Masquerading a "hepatic Space Occupying Lesion." J Pediatr Hematol Oncol 2023;45(4):207–208. DOI: 10.1097/MPH.0000000000002654.

Through this illustrative case report, authors have described the presentation of an extremely rare mature cystic teratoma of the gall bladder as a space-occupying lesion in an 11-month-old boy who presented with incidentally detected hepatomegaly. A computed tomographic abdomen demonstrated a multiseptated lesion arising from segments V and VI of the liver. Intraoperatively, a 50 × 40 mm lesion was seen to arise from the gall bladder with invasion into adjacent tissues. Surgically, an extended cholecystectomy was undertaken. Pathology revealed a multiloculated cystic teratoma comprising mature benign tissues derived from all three germ cell layers. Authors have highlighted that teratomas of the gall bladder usually present as a mass lesion, unlike rhabdomyosarcoma, the most common biliary tumor in children, which presents with obstructive jaundice due to its intrabiliary growth.

Source: Mahajan S, Lal BB, Kumar P, et al. Treatment of intractable cholangitis in children with biliary atresia: impact on outcome. Indian J Gastroenterol 2023. DOI: 10.1007/s12664-022-01328-2.

In this retrospective single-center study, authors have aimed to evaluate the response and outcome with prolonged intravenous antibiotics, including home-based intravenous antibiotics (HIVA) in children with intractable cholangitis (IC) defined as no resolution after 4 weeks of antibiotics after Kasai portoenterostomy for biliary atresia. A total of 20 children managed between 2014 and 2020, initially listed for liver transplantation (LT) with the indication being IC (n =20) with portal hypertension (n = 12), were enrolled. A protocol-based antibiotic regimen was used based on sensitivity and hospital antibiogram. Children who were afebrile for >3 days were discharged on HIVA. Seven patients had bile lakes, of which four underwent percutaneous transhepatic biliary drainage. There were eight children with IC who had positive blood cultures, with most of these organisms being gram-negative and *Escherichia coli* being the most common one. The median duration of antibiotics was 58 days. The median follow-up period postcholangitis was 3 years. Following treatment, 14 patients were successfully delisted from the LT waitlist and were jaundiced-free on review. Two of the five patients who underwent LT died of sepsis, and one died awaiting LT. Authors have concluded that a timely and aggressive step-up antibiotic regimen may successfully treat IC and prevent/delay LT. HIVA provides a cost-effective and comfortable environment for a child, which might improve compliance with intravenous antibiotics.

Division of Pediatric Gastroenterology, Department of Pediatrics, Sree Avittom Thirunal Hospital for Women and Children (SAT Hospital), Government Medical College, Thiruvananthapuram, Kerala, India

Corresponding Author: Prasanth K Sobhan, Division of Pediatric Gastroenterology, Department of Pediatrics, Sree Avittom Thirunal Hospital for Women and Children (SAT Hospital), Government Medical College, Thiruvananthapuram, Kerala, India, Phone: +91 9446175759, e-mail: drprasanthksobhan@gmail.com

How to cite this article: Sobhan PK. Publications by ISPGHAN Members in PubMed Indexed Journals. Ann Pediatr Gastroenterol Hepatol 2023;5(2):40–41.

Source of support: Nil

Conflict of interest: Dr Prasanth K Sobhan are associated as the Editorial board members of this journal and this manuscript was subjected to this journal's standard review procedures, with this peer review handled independently of these Editorial board members and their research group.

Source: Kumar K, Gupta N, Malhotra S, et al. Functional constipation: a common and often overlooked cause for abdominal pain in children. Indian J Gastroenterol 2023. DOI: 10.1007/s12664-022-01329-1.

In this single-center study, authors have aimed to ascertain the prevalence of functional constipation (FC) in chronic pain abdomen and the proportion of FC children presenting with predominant complaints of pain abdomen. Prevalence of FC and functional abdominal pain was ascertained separately over a 1-year in children >4 years of age in their hospital. The diagnosis was based on Rome IV criteria, but relevant investigations to rule out organic pathology were done whenever clinically indicated. They have observed that among children presenting with constipation, 12% had pain as the sole complaint. However, some form of pain or pain as one of the symptoms was seen in 47.5%. Authors have concluded that FC is a major cause of abdomen pain in children and is often overlooked, resulting in delayed diagnosis.

Source: Vij M, Menon J, Subbiah K, et al. Pathologic and immunophenotypic characterization of syncytial giant cell variant of pediatric hepatocellular carcinoma. A distinct subtype. Fetal Pediatr Pathol 2023;1–10. DOI: 10.1080/15513815.2023.2201318.

Through this illustrative case series of two children who underwent living donor liver transplantation, the authors have reported their single-center experience of a distinct histological variant of pediatric hepatocellular cancer (pHCC) with syncytial giant cells. In contrast to conventional pHCC, which typically occurs in older children, this variant has a predilection to occur in infancy with a background of chronic liver diseases like biliary atresia and transaldolase deficiency. These tumors present with high serum α-fetoprotein (AFP), and both mononuclear and multinucleate neoplastic cells show AFP and epithelial cell adhesion molecule immunohistochemical expression.

Source: Kaur P, Lal BB, Sood V, et al. Alert: not all acute hepatitis with raised INR is acute liver failure! Indian J Pediatr 2023. DOI: 10.1007/s12098 - 023 - 04602-z.

In this scientific letter, authors have reported an illustrative case of a 7-year-old girl born to third-degree consanguineous parents, referred for urgent liver transplantation (LT) with a diagnosis of hepatitis-A virus-induced acute liver failure. However, over 48 hours postadmission, the child showed clinical improvement and resolution of hepatic encephalopathy. But international normalized ratio (INR) continued to remain high (3.36). Her mother, who was being evaluated as a probable liver donor, also had a high INR (3.2) with normal clinical and biochemical liver parameters. The mother gave a history of occasional menorrhagia, which raised the suspicion of an underlying hereditary coagulation disorder in the family. Coagulation studies showed decreased factor VII levels in the child [5.3% (normal: 50–120%)] as well as the mother (8.4%). The child was thus saved from an unnecessary LT. Genetic sequencing confirmed the presence of a homozygous variant on exon 8 of the F7 gene on chromosome 13 (c.749C>T; p.Ser250Phe) in the child and the mother clinching the diagnosis of factor VII deficiency. Authors have concluded that in the setting of acute hepatitis, elevated INR disproportionate to the clinical course and other liver biochemical parameters should raise a suspicion of an underlying coagulation disorder like factor VII deficiency, which could save the children from unnecessary LT.

Source: Poddar U, Samanta A. Probiotics for functional constipation in children: does it help? Indian Pediatr 2023;S097475591600523.

Through this invited commentary, authors have extensively reviewed the literature on the role of probiotics in children with functional constipation (FC) and concluded that currently, there is not enough evidence for the recommendation of probiotics for FC. They have commented that research with well-established and homogeneous methodologies is required to determine causal relationships between functional constipation and alteration of fecal microbiota, as well as the efficacy of using probiotics to treat children and adolescents with FC.

Source: Bolia R, Thapar N, Withers GD, et al. Characterization of colonoscopies in preschool children. J Pediatr Gastroenterol Nutr 2023. DOI: 10.1097/MPG.0000000000003826.

In this single-center retrospective study, authors have aimed to describe the indications, diagnostic yield, complications, and cecal and ileal intubation rates (CIR and IIR) for colonoscopies in preschool children aged <6 years. Data from 219 preschool children who underwent colonoscopies between 2014–2020 (which constituted 19% of total colonoscopies) were extracted and enrolled in the study. Demographic factors, indication for colonoscopy, extent of colonoscopy, CIR, IIR, and histologic findings were noted. Preschoolers were further subdivided into those aged <2 years and those aged 2–<6 years. The median age was 3.9 (range 0.3–5.9) years, and the most common indications in preschoolers were rectal bleeding 35% (n = 78), inflammatory bowel disease 24% (n = 53), diarrhea 13% (n = 30), iron-deficiency anemia 11% (n = 25), and abdominal pain 7% (n = 16). IIR and CIR were lower in preschoolers compared to older children, 81 vs 92% (p = 0.0001), and 93 vs 96.4% (p = 0.02), respectively, and even lower in those aged <2 years, 48.1% IIR (p = 0.0001) and 85.1% CIR. Juvenile polyps, 31% (n = 27), were the most common positive finding in preschool children. The authors have concluded that high IIR is achievable in young children, but rates are increasingly lower the younger the child.

Source: Bolia R, Goel A, Semwal P, et al. Oral tacrolimus in steroid refractory and dependent pediatric ulcerative colitis - a systematic review and meta-analysis. J Pediatr Gastroenterol Nutr 2023. DOI: 10.1097/MPG.0000000000003827.

Authors have performed a systematic review and meta-analysis to assess the efficacy of tacrolimus in children with steroid-refractory or dependent ulcerative colitis (UC). Data regarding the clinical response and colectomy-free survival were extracted from studies that met the selection criteria, which included 166 children (111 steroid-refractory, 52 steroid-dependent, and three no steroids from seven eligible studies). A total of 90% of cases were naïve to biologics. An initial response to tacrolimus therapy was seen in 84%. No difference was observed between children with high (>10 ng/mL) or low tacrolimus levels. No difference in initial response was also observed between the children who were steroid-refractory or dependent. The response in the biologic-exposed group (n = 10) was 70%. At 1 year follow-up, 15.2% had a sustained response on only tacrolimus. The pooled frequency of 1-year colectomy-free survival in children treated with initial oral tacrolimus was 64%. A total of 7.2% of patients required cessation of therapy because of side effects. They have concluded that tacrolimus has a high initial response in biologic naïve UC children and can be effectively used as a bridge to other therapies with a 1-year colectomy-free survival of 64%.