

# PUBLICATIONS BY ISPGHAN MEMBERS IN PUBMED INDEXED JOURNALS

(26<sup>th</sup> September, 2021 – 31st December, 2021)

Updated as on 31<sup>st</sup> December, 2021

## SEPTEMBER 2021

[1.] Mathias A, Yachha SK, Srivastava A. **Hepatitis B Transmission: Is Vertical Transmission the Major Route in Intermediate Endemic Areas? A Proof-of-Concept Study Based on Mother-Child Genotypes.** *Am J Trop Med Hyg.* 2021 Sep 27; 105(6):1569-1574

In this study authors have aimed to establish mother-child transmission as the main route of acquisition of chronic hepatitis B in children by documenting genotypically identical viruses in mother-child dyad. Blood samples of consecutive children (less than or equal to 18 years) with CHB and high DNA (> 10,000 IU/mL) and their positive mother were collected, DNA was extracted and their genotyping was done. Genotyping of 59 (33 children and 26 mothers) subjects confirmed genotype A in 24 (40.7%) and genotype D in 35 (59.3%). Both mother-child pair genotyping was possible in 25. The concordance between children and their mothers was 24 of 25 (96%). Phylogenetic analysis showed significant homology between mother and child sequences for both genotype A and D, suggesting thereby the same virus adding proof to the concept that mother-baby transmission is the major route of acquisition of HBV in children in India.

[2.] Dohare N, Madhusudhan KS, Malik R, Das P, Sharma S. **Utility of Hepatic 2D Shear-Wave Elastography in Monitoring Response to Image-Guided Intervention in Children With Chronic Budd-Chiari Syndrome: A Prospective Study.** *AJR Am J Roentgenol.* 2021 Sep 29. doi: 10.2214/AJR.21.26547. Epub ahead of print.

Authors have assessed the utility of 2D shear-wave elastography (SWE) for monitoring response to image-guided intervention in children with BCS, with attention to changes in liver stiffness measurement (LSM) in patients with disease recurrence. This prospective study included children with chronic BCS and planned image-guided intervention. Color Doppler ultrasound (CDUS) and 2D SWE were performed at baseline; at 24 hours, one month, and three months after intervention; and thereafter every three months or at the time of clinically suspected recurrence. Eighteen children underwent liver biopsy at the time of intervention for fibrosis staging using METAVIR criteria. Disease recurrence was diagnosed by CDUS. 32 children (28 boys, 4 girls; mean age: 9.0 years; range: 3-14 years) were enrolled. Median LSM was at baseline 43.7 kPa, at 24 hours 22.5 kPa, at one month 18.7 kPa, and at three months 16.7 kPa ( $p < .05$  for all post-intervention time points vs baseline). Nine (28.1%) patients developed recurrence after intervention at mean of 4.4 months. Authors have concluded that LSM decreased significantly after image-guided intervention for chronic BCS in children, showing a maximal decrease

at 24 hours post-intervention. Disease recurrence was typically associated with an increase in LSM compared with the patient's prior measurement.

## OCTOBER 2021

[3.] Ravindranath A, Wadhwa RP, Sandeep BS, Srikrishna KK. **Infant with "Ascites".** *J Pediatr.* 2021 Oct; 237:314-31

Authors have reported a 10-month-old boy who presented with progressive generalized abdominal distension noted since 6 months of age. There was no history of jaundice, periorbital puffiness, or sacral or pedal edema Examination revealed a nontender, distended abdomen with dull percussion note and positive fluid thrill. Ultrasonogram showed a large amount of free fluid in abdomen with internal echoes and septations. Contrast enhanced computed tomography of the abdomen, which showed a large, hypodense lesion with fluid attenuation occupying the entire abdomen from the sub-diaphragmatic space to the pelvis; the small bowel loops were displaced to the center and the large bowel loops were pushed laterally. These findings were suggestive of intraperitoneal cystic lesion. The child underwent laparotomy, which showed a large multiloculated omental cyst with frond-like ramifications occupying the entire abdomen. The cyst was excised. On the cut section, there was brown jelly-like fluid, and a histopathologic examination showed mesothelial lining of the cyst. The child made an uneventful recovery and has remained asymptomatic at 6 months of follow-up. Authors have highlighted that ultrasonogram shows septae and internal echoes within the cyst cavity, which may mimic ascites in case of giant omental cyst. In developing countries, peritoneal tuberculosis is in the differential diagnosis for ascites with internal echoes and septae. Computed tomography can usually differentiate cyst from ascites based on the displacement pattern of the bowel loops and absence of perihepatic fluid. However, occasionally giant omental cysts can cause confusion by occupying perihepatic spaces. Accurate diagnosis based on imaging can avoid unnecessary aspiration of the fluid.

[4.] Bolia R, Goel A, Srivastava A. **Systematic Review and Meta-Analysis of Thiopurine Metabolite Levels and Biochemical Remission in Autoimmune Hepatitis.** *Ther Drug Monit.* 2021 Oct 1;43(5):609-616. doi: 10.1097/FTD.0000000000000848.

In this his systematic review and meta-analysis authors have aimed to compare the mean concentration of thiopurine metabolites (TM) between patients with autoimmune hepatitis (AIH) in biochemical remission and those not in remission. There were 3 pediatric studies and 4 adult studies eligible for inclusion in study design and 442 TM measurements

(n = 128 in children) were analyzed. Mean 6-TGN levels were significantly higher among patients in remission than in those who were not in remission. The difference was higher in the pediatric age group than in adults. But there was no significant difference in the 6-MMP levels or 6-MMP/6-TGN ratio among the patients who were and those who were not in biochemical remission. Authors have concluded that there is a link between 6-TGN levels and biochemical remission in AIH.

[5.] Sarma MS, Seetharaman J. **Pediatric non-cirrhotic portal hypertension: Endoscopic outcome and perspectives from developing nations.** *World J Hepatol.* 2021 Oct 27; 13(10):1269-1288. doi: 10.4254/wjh.v13.i10.1269.

In this mini-review authors have discussed the natural history, endoscopic outcome, and management of non-cirrhotic causes of portal hypertension in children, especially in resource constraint developing nations. Extrahepatic portal vein obstruction is the most common cause of portal hypertension in developing countries. Endoscopic variceal ligation and sclerotherapy effectively eradicate the esophageal varices. Other complications require shunt surgery that ultimately reverses portal hypertension. Non-cirrhotic portal fibrosis (NCPF) is a less common cause of portal hypertension in children and has favourable outcomes in terms of variceal bleeding and mortality. Isolated congenital hepatic fibrosis (CHF) has a relatively good outcome. Liver transplantation is required when CHF is associated with Caroli's disease, recurrent cholangitis, and decompensation. The presence of significant renal disease requires combined liver and kidney transplantation.

## NOVEMBER 2021

[6.] Madhusudhan KS, Malik R, Chouhan P, Sharma S. **Radiation Exposure During Direct Intrahepatic Portosystemic Shunt in Pediatric Budd-Chiari Syndrome: Initial Experience from a Tertiary Care Center.** *Cardiovasc Intervent Radiol.* 2021 Nov;44(11):1839-1840. doi: 10.1007/s00270-021-02932-z. Epub 2021 Jul 27. PMID: 34318338.

Budd-Chiari syndrome (BCS) in children is a rare condition which often requires treatment with direct intrahepatic portosystemic shunt (DIPS) when hepatic veins are not suitable for recanalization. Transjugular intrahepatic portosystemic shunt (TIPS) and DIPS are complex interventional procedures which expose patients to considerable amounts of radiation. In BCS, the enlarged caudate lobe increases the distance between the IVC and the portal vein, increasing the technical difficulty and duration of the procedure leading to a higher radiation dose. Further, the small vascular structures in younger children potentially increase the procedure complexity and procedure time. In this retrospective study published as letter to the editor, the authors have aimed to assess the radiation doses of direct intrahepatic portosystemic shunt (DIPS) procedure in children with BCS. The authors have concluded that radiation dose during DIPS procedure was much lower than the recently proposed diagnostic reference levels (DRL) and could be further lowered by reducing the digital subtraction angiography (DSA) and fluoroscopy frame rates to 2 and 7.5 frames per second, respectively.

[7.] Janwadkar A, Nagral A, Marar S, Sonavane A, Raut V, Vasanth S, Mirza D. **Positional outflow obstruction as**

**a cause of early refractory ascites post-pediatric living donor liver transplantation.** *Pediatr Transplant.* 2021 Nov;25(7):e13969. doi: 10.1111/ptr.13969.

Hepatic venous outflow obstruction (HVOO) may be secondary to IVC block, anastomotic narrowing, or thrombosis of venous outflow or kinking of hepatic venous vessels, especially in the setting of LDLT. In this case report authors describe a 6 year old child presenting with high drain output and refractory ascites post-LDLT secondary to a positional kinking picked up by performing a Doppler in sitting and supine positions which was relieved by balloon angioplasty and hepatic vein stenting. Authors have presented this case to emphasize the need for performing a Doppler in sitting and supine positions to appreciate the positional increase in gradient in a suspected HVOO post-transplant due to a possible kink.

[8.] Dhakre VW, Shah P, Nagral SS, Nagral A. **Letter to the Editor: Congenital Extrahepatic Portosystemic Shunts (Abernethy Malformation): A New Variant.** *Hepatology.* 2021 Nov; 74(5):2902. doi: 10.1002/hep.31427. Epub 2021 Sep 28.

In this letter to the editor authors have described and reported a very rare case of congenital extrahepatic portosystemic shunt (CEPS) in an 18-year-old adolescent male who presented with acute onset right-sided abdominal pain associated with giddiness and an episode of unconsciousness. On evaluation he had hyperammonemia and hyperbilirubinemia. Contrast enhanced computed tomography of abdomen demonstrated anomalous drainage of the portal vein (PV) directly into the right atrium (RA). This is possibly first description in the literature of a porta-atrial shunt and is not covered by classification systems proposed by current classification system of CEPS and such large shunts with direct communication with the RA may not be amenable to the usual radiological interventions.

[9.] Yewale RV, Natarajan K, Ubal Dhus J, Parameswaran SA, Ramaswamy Palaniswamy K, Babu Vinish D, Somasundaram A, Ramakrishnan A, Karmegam S, Arun RS, Manmohan US, Mahadevan B, Harri Prasad B, Chandrasekar TS, Gokul BJ, Dutta A, Joseph AJ, Venkatraman J, Ganesh P, Shanmuganathan S, Alagammai PL, Ramasubramanian R, Venkatakrishnan L, Ganesan R, Chandrasekaran Arun A, Srinivas S, Kannan M, Revathy MS, Sathiyasekaran M, Sarangapani A, Rajesh N, Arulselvan V, Aravind A, Premkumar K, Kavitha S, Varadarajulu HV, Manimaran M, Basumani P, Murali A, Ramakrishna BS. **Inflammatory bowel diseases in Tamil Nadu: A survey of demographics, clinical profile, and practices.** *JGH Open.* 2021 Nov 5;5(11):1306-1313. doi: 10.1002/jgh3.12673.

This cross-sectional multicentre online survey conducted by the Tamil Nadu Chapter of the Indian Society of Gastroenterology (TNISG) from March 2020 to January 2021 aimed to document the demography, clinical profile, and therapeutic practices related to IBD in Tamil Nadu. This consortium included multiple pediatric gastroenterology centres representing members from ISPGHAN fraternity also and salient findings of pediatric IBD from this study are mentioned below. For the purposes of this study, patients of age 16 years or younger were classified as pediatric IBD. This age cut-off was consonant with the Porto criteria as well as the Montreal

classification in which the A1 group is 16 years old or less. In this survey, 138 patients belonged to the pediatric age group. Of the 138 patients with pediatric IBD ( $\leq 16$  years), 23 were characterized as very early onset IBD (VEO-IBD, 0–5 years), 27 as early-onset (EO-IBD, 6–10 years), and 88 as adolescent IBD (Adol\_IBD, 11–16 years). Diarrhea followed by blood in the stool was the most common symptom in VEO-IBD, whereas abdominal pain and diarrhea were the most common symptoms in older children with IBD. VEO-IBD were more likely to have a positive family history of IBD and were more likely to have perineal disease and to have the IBD-Unclassified (IBD-U) phenotype. Among pediatric IBD patients, corticosteroids, mesalamine, and azathioprine were the most commonly used medications, while 25 (18.1%) pediatric patients received biologics.

**[10.] Dhochak N, Singh A, Malik R, Jat KR, Sankar J, Makharia G, Kabra SK, Lodha R. Acute gastrointestinal injury in critically ill children: Impact on clinical outcome. J Paediatr Child Health. 2021 Nov 9. doi: 10.1111/jpc.15804. Epub ahead of print.**

Authors have aimed to estimate acute gastrointestinal injury (AGI) in critically ill children and association of its severity with mortality. In this prospective cohort study, 151 critically ill children (1 month-18 years) were enrolled. Gastrointestinal symptoms over the first week of admission were classified into AGI grades 1 through 4, using a paediatric adaptation of European Society of Intensive Care Medicine AGI definitions. Performance of AGI grades in predicting 28-day mortality was evaluated. 71 (47%, 95% confidence interval (CI): 38.9-55.3%) developed AGI, with AGI grades 1, 2, 3 and 4 in 22.5%, 15.9%, 6.6% and 2%, respectively. The 28-day mortality progressively increased with AGI grade 0 (15%), 1 (35%), 2 (50%), 3 (70%), through 4 (100%),  $P < 0.001$ . Association of AGI grades with 28-day mortality was significant even after adjustment for disease severity, age and nutritional status (odds ratio (OR) = 2.152, 95% CI: 1.455, 3.184). Authors have concluded that 50% critically ill children developed AGI and AGI grades were independently associated with increased 28 day mortality which progressively increased with AGI grade.

**[11.] Sarma MS, Tripathi PR, Arora S. Corrosive upper gastrointestinal strictures in children: Difficulties and dilemmas. World J Clin Pediatr. 2021 Nov 9;10(6):124-136. doi: 10.5409/wjcp.v10.i6.124.**

In this mini review authors have discussed the difficulties and dilemmas in the management of corrosive upper gastrointestinal strictures in children. The cornerstone of management of esophageal strictures is endoscopic bougie or balloon dilations. In case of resistant strictures, newer adjunctive therapies like intralesional steroids, mitomycin and stents can be utilized along with endoscopic dilatation. Surgery is the final resort for strictures resistant to endoscopic dilations and adjunctive therapies. There is no consensus on best esophageal replacement conduit. Pyloric strictures require balloon dilatation, failure of which requires surgery. Patients with post-corrosive strictures should be kept in long term follow-up due to significantly increased risk of carcinoma.

**[12.] Sharma SS, Sankaranarayanan S, Kumar VH, Kumar NC, Sundaram CS. Congenital Diarrheal Disorders in**

**Neonates: A Single-Center Experience. Indian Pediatr. 2021 Nov 15;58(11):1096-1097.**

In this research letter authors have described their experience of congenital diarrhoeal disorders (CDD) in neonates. This single centre case series (n=6) showed that congenital brush border enzyme deficiencies are the most common form of CDDs rather than congenital enteropathies or ion channelopathies. They have described 3 cases of congenital glucose-galactose malabsorption (CGGM) which has autosomal recessive inheritance with classical triad of hypernatremia, hypoglycemia and metabolic acidosis who had improvement with fructose-based special formula. Of the remaining 3 CDDs, two cases were diacylglycerol acyltransferase (DGAT-1) deficiency who presented during the second week of life with feed refusal and failure to thrive on exclusive breastfeeds. These children, in addition to dehydrating diarrhea had recurrent vomiting, hypoalbuminemia, hypertriglyceridemia and occasional bulky/greasy stool. The other patient presented with neonatal cholestatic jaundice, osmotic diarrhea on exclusive breastfeeds and failure to thrive. Serum total IgE levels were elevated, suggesting atopy. The child improved dramatically on a trial of hypoallergenic formula rich in MCT. Next generation sequencing (NGS) revealed an eventual diagnosis of congenital lactase deficiency.

**[13.] Vij M, Sankaranarayanan S. Biallelic Mutations in Ubiquitin-Specific Peptidase 53 (USP53) Causing Progressive Intrahepatic Cholestasis. Report of a Case With Review of Literature. Pediatr Dev Pathol. 2021 Nov 22 doi: 10.1177/10935266211051175.**

In this case report authors have identified and reported novel biallelic mutations in the ubiquitin-specific peptidase 53 (USP53) gene in a 7-month-old infant who presented with pruritus and progressive intrahepatic cholestasis. This case report adds to the utility of next-generation sequencing studies in the diagnostic evaluation of normal- or low-GGT pediatric cholestasis.

**[14.] Gopan A, Sarma MS. Mitochondrial hepatopathy: Respiratory chain disorders- 'breathing in and out of the liver'. World J Hepatol. 2021 Nov 27; 13(11):1707-1726. doi: 10.4254/wjh.v13.i11.1707. PMID: 34904040; PMCID: PMC8637684.**

In this mini review authors have discussed the multifaceted presentations and progression of mitochondrial hepatopathies with illustrations of prototypes for easy comprehension. They have highlighted that liver disease with multi-system involvement should arouse the suspicion for mitochondrial respiratory chain hepatopathies, which are predominantly autosomal recessive disorders. The liver involvement is also variable in clinical presentation as well as in age of onset, from acute liver failure, cholestasis, or chronic liver disease. Presence of lactic acidosis without hypoglycemia is an important clue to suspect mitochondrial hepatopathy. A structured evaluation yields the diagnosis, with the final step being a genetic and enzyme analysis from tissue of interest. Treatment is largely supportive with blood transfusions, correction of acidosis and shock, providing cofactors and salvage therapies, with liver transplantation only in a select group (in hepatocerebral form of DGUOK defects when detected in infancy without neurological involvement). They emphasize that a periodic follow-up

is mandatory for monitoring evolution of disease including “migration” to other systems.

[15.] Ravindranath A, Sen Sarma M, Yachha SK. **Congenital enterocolic fistula discovered by jejunoscopy. *Pediatr Neonatol.* 2021 Nov 29;S1875-9572(21)00231-X. doi: 10.1016/j.pedneo.2021.10.004. Epub ahead of print. PMID: 34922849.**

In this case report authors have described an eight year old girl who presented with painless abdominal distension, belching, flatulence and growth retardation since infancy. She had no history of ongoing diarrhea, constipation, perianal fistulas, fever, previous abdominal surgeries, trauma or necrotising enterocolitis in neonatal period. On evaluation she had dimorphic anemia and normal upper GI endoscopy and GI contrast series. CT Scan showed dilated bowel loops. Her basal breath hydrogen level was elevated (30 ppm) confirming small intestinal bacterial overgrowth [SIBO]. Deep jejunal intubation was performed with a pediatric colonoscope. Proximal jejunum showed fecal matter with a non-ulcerated fistula through which the endoscope entered the colon. Colonoscopy confirmed site of fistula in descending colon. Histopathology of the mucosal biopsies taken from the site of fistulous opening was normal. Thorough work-up for Crohn's disease, tuberculosis and immunodeficiency states were unyielding. She underwent laparotomy which showed a single fistula, 10 cm distal to duodenojejunal flexure connected to descending colon without any adjoining strictures, lymph nodes or adhesions. The fistula was resected en-bloc followed by jejunojejunal and colocolic anastomosis. Histopathology did not reveal inflammatory or infective pathology. At 60 months of vigilant follow-up, she continued to remain asymptomatic with normal abdominal examination and had attained puberty with rapid catch-up in her growth parameters. Through this case report authors have demonstrated that in presence of chronic abdominal complaints, SIBO and growth failure careful evaluation should be done for gastrointestinal internal fistula and highlight the fact that jejunoscopy is recommended in situations where index of suspicion is high and radiology is unyielding.

## DECEMBER 2021

[16.] Deshmukh A, Jhaveri A, Nagral A, Marar S. **Techniques and Outcomes of Transjugular Intrahepatic Portosystemic Shunting in Infants with Budd-Chiari Syndrome. *J Vasc Interv Radiol.* 2021 Dec; 32(12):1637-1643.**

Authors have aimed to describe the technical aspects, feasibility, and outcomes transjugular intrahepatic portosystemic shunt (TIPS) in infants with Budd-Chiari syndrome (BCS) in this retrospective study. Eight infants (5 males) underwent TIPS creation (7 for refractory ascites and 1 for refractory variceal bleeding) during the study period. The median age at TIPS creation was 10.5 months (range, 8-16 months). The median elapsed time between presentation and TIPS creation was 6.5 months (range, 0-13 months). The median weight and median pediatric end-stage liver disease score of the infants at the time of TIPS creation were 6.7 kg (range, 5.4-10 kg) and 13 kg (range, 8-18 kg), respectively. An 18-gauge hollow needle was manually curved, through which a 21-gauge Chiba needle was inserted to access the portal vein. All patients received 1 or 2 overlapping bare metal stents. One patient was lost to follow-up after the procedure. The median

follow-up duration was 32 months (range, 14-51 months). Four of 7 infants needed re-intervention. Two children died during the follow-up period. Two children successfully underwent living donor liver transplant, whereas the remaining 3 children were asymptomatic at the follow-up. Authors have concluded that TIPS creation was safe and efficacious in improving portal hypertension and growth in these children, although, with a higher rate of reinterventions.

[17.] Poddar U, Vadlapudi SS. **What Is the Best for Colon Preparation: Single-Dose, Split-Dose or Add-ons to Polyethylene Glycol? *Indian Pediatr.* 2021 Dec 15;58(12):1115-1116.**

In this editorial commentary to the article, Hein PT, Thoi VH, Ha NT, Kalach N. Effectiveness of two regimens for colon cleansing using polyethylene glycol 4000: a randomized open label trial. *Indian Pediatr.* 2021; 58:1119-23, authors have pointed out the strength of study resulting from the randomized trial design and 2 drawbacks, regarding the different volume of PEG used in the two regimens and use of glycerol enema twice in the latter group with poor inherent acceptability. The editors have highlighted on an unmet need to have a larger randomized controlled trial to compare low dose PEG with low dose PEG plus and stimulant laxative for colon preparation.

[18.] Seetharaman J, Poddar U, Yachha SK, Srivastava A, Sarma MS. **Efficacy of amitriptyline in Pediatric Functional abdominal pain disorders: A randomized placebo-controlled trial. *J Gastroenterol Hepatol.* 2021 Dec 21. doi: 10.1111/jgh.15765. Epub ahead of print.**

In this open-label trial, authors have aimed to evaluate the efficacy of amitriptyline in pediatric functional abdominal pain disorders (FAPD) [children ( $\leq 18$  years)] diagnosed using ROME IV criteria. Children were randomized to two groups amitriptyline or placebo (amitriptyline 75, placebo 74) for 12 weeks. Post-treatment improvement of pain and quality of life (QOL) from the baseline were compared between the two groups. The mean age of 149 children was  $11.3 \pm 3.5$  years. There was a significant difference in pain improvement in terms of reduction in scores for intensity (3.4 vs. 0.9), frequency (3.6 vs. 0.6), duration (3.5 vs. 0.9), and QOL (2.3 vs. 0.9) between amitriptyline and placebo group ( $p < 0.001$  in all). Responders ( $> 50\%$  reduction) in pain was seen in 76% in amitriptyline compared to 14.9% in the placebo group ( $p < 0.001$ ). On multivariate analysis, the use of amitriptyline was the only factor predictive of response (OR 24.1, 95% CI: 9.1-64.6,  $p < 0.001$ ). Minor adverse events were comparable between the groups (25.3% vs. 13.5% respectively,  $p = 0.07$ ). 89% of children (24/27) who had extended treatment duration ( $6.8 \pm 1.8$  months) had pain improvement. After discontinuation of amitriptyline, 70% had sustained response over a mean follow-up of  $15.84 \pm 5.6$  months. Authors have concluded that a three-month trial of amitriptyline gives sustained relief of pain in two-thirds of children with FAPD.

## MISSED INADVERTENTLY IN PREVIOUS ISSUES

### MAY 2021

[1.] Sonavane A, Raut V, Marar S, Sawant A, Shah K, Raj A, Thorat A, Chaksota H, Bagde A, Verma R, Dharmapalan D,

Vasanth S, Nagral A, Mirza D, Yewale V. Preoperative successful thrombectomy and thrombolysis of acute extensive splanchnic venous system and TIPSS thrombosis in a child with Budd-Chiari syndrome-Creating a window to enable living donor liver transplantation. *Pediatr Transplant*. 2021 May; 25(3):e13857. doi: 10.1111/petr.13857. Epub 2020 Nov 24. PMID: 33232561.

In this case report authors have described a 10 year old boy with chronic Budd-Chiari syndrome and decompensated cirrhosis, who developed extensive thrombosis of the porto-spleno-mesenteric venous system prior to liver transplantation. They have used a combination technique of thrombus aspiration by a novel trans-TIPSS approach followed by thrombolysis [Using a retrograde right transjugular trans-TIPSS approach, the PV, SV, and SMV were cannulated. Maceration of the thrombus in the TIPSS, PV, SV, and SMV was done with balloon dilatation followed by mechanical thrombus aspiration using a 6F shuttle sheath and a 50 cc syringe. Following this, thrombolysis was done using tPA (15 mg bolus dose and continuous infusion of 1 mg/hour)]. Complete preoperative resolution of the extensive thrombosis was achieved. This allowed the creation of a brief window to enable planned LDLT. They have concluded that in prudently selected patients, performing an early mechanical and chemical thrombolysis of an extensive acute splanchnic venous thrombosis can thus help expedite a planned LDLT.

## AUGUST 2021

[2.] Gupta S, Sudhindran S, Saraf N, Vijai A, Swaminathan S, Panackel C, Mehta NN, Varghese J, Singh S, Reddy MS, Viswanathan MS, Bhangui P, Mohanka R, Asthana S, Rohatgi S. Liver Transplant Society of India Guidelines for Liver Transplant during COVID-19 times. *J Clin Exp Hepatol*. 2021 Aug 20. doi: 10.1016/j.jceh.2021.08.0

The Liver Transplant Society of India (LTSI) has prepared guidelines regarding selection of adult and pediatric patients for liver transplantation, transplant for acute liver failure, use of deceased donor organs, transplant techniques and minimally invasive donor hepatectomy, pre and post-surgery testing for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)-related coronavirus disease 2019 in donors and recipients, role of COVID-19 antibody testing, shifting of recipients from COVID-19 to non-COVID-19 areas after recovery, isolation policy of team members exposed to COVID-19 patients, drug therapy of proven or suspected COVID-19 infection early post-transplant, care of SARS-CoV-2 positive donors and recipients and a separate COVID-19 consent for surgery.

*Compiled by Dr.Prasanth.K.S*