



Pediatric Liver Transplantations and COVID-19



The Pravin Agarwal Foundation (TPAF) organized Asia’s biggest paediatric liver transplant conclave – **Affordable Liver Transplants Conclave (ALTC) 2020**, on *Tuesday, 6th October* as a *webinar* which was streamed live on YouTube. The theme for this year was **Paediatric Liver Transplants and Covid-19**.

“This platform has emerged as a learning and knowledge-sharing platform for all of us. I am so glad and humbled to see panellists and participants join us from across the globe to support this noble cause. It is the first time that we have organised a webinar and connected virtually to make this conclave a success,” commented **Mr Pravin Agarwal, the Founder of The Pravin Agarwal Foundation, Chairman, Sterlite Power Transmission Limited and Vice Chairman, Sterlite Technologies Limited**.

Panel-1 Paediatric Liver Transplants in the times of Covid-19: Indian and International perspective

Moderated by ***Dr Sanjay Rao, Senior Consultant and Head Department of Paediatric Surgery; Solid Organ Transplant Program Narayana Health Hospitals, Bangalore.***

Our first panel discussion saw leading transplant surgeons and knowledge experts share their views and ways to ensure patient safety during such unprecedented times. **Dr Arvinder Soin, Chairman and Chief Surgeon at Medanta Liver Transplant Institute,** pointed out that the precautions and protocols drafted by **The Liver Transplant Society of India** is followed to ensure the safety of patients and healthcare staff. The protocols are:

- To quarantine the recipient, donor and the attendant of the patient for at least seven days before the transplantation (initially done for 15 days). This is done to limit the chances of getting a COVID infection before the transplant.
- To ensure the recipient, donor and attendant undergo two tests for COVID-19, performed five days apart. The most recent test is performed 48 hours prior to the transplant. They have

to undergo the COVID-19 RT-PCR test known as the reverse transcription-polymerase chain reaction test.

- To ensure the safety of the healthcare workers, they are tested every 5 to 7 days or if suspected to have come in close contact with a COVID patient or suspect.
- To make sure there is limited or no contact between COVID and non-COVID patients, different channels of entry and exit are made within the hospitals. Hospitals follow strict segregation in the treatment and movement of patients with and without COVID infection.
- To ensure utmost safety, doctors, healthcare staff, housekeeping persons, technical staff and others who accompany in surgeries are asked to wear full surgical kits (not just PPE kits) with a disposable visor. The doctors concluded that moving ahead given the COVID-19 scenario more stringent precautionary methods would be needed to carry out paediatric liver transplants as avoiding them could be life-threatening for a child and this applies to countries across the globe.

MOVING AHEAD WITH COVID-19

- **Dr Soin**, emphasised that testing should be more stringent now. And a donor's welfare needs to be considered and cannot be endangered by ignoring the testing protocols.
- **Dr Mohamed Rela, Chairman & Managing Director Dr Rela Institute & Medical Centre** reinstated the importance of testing for COVID-19 for both recipient and donor as most of the time patients infected with COVID-19 are usually asymptomatic.
- **Dr Catherine Teh, President Philippine Association of HPB Surgeons; Director, PCS Cancer Commission Surgical Quality Improvement Program** believes that moving ahead COVID is going to change the algorithm that has been followed conventionally. She also feels that the precautions that are been followed should be made mandatory going ahead and creating a public education system to make them more disciplined.
- **Dr Sonal Asthana, Clinical Lead, HPB and Multiorgan Transplant Surgery, Aster Integrated Liver Care (ILC) group, Aster Group of Hospitals** stated that RT-PCR tests and CT scans would become a norm moving ahead, in the surgical scenario, in the intermediate future.

Talk- Future Directions in Paediatric Liver Transplantation

A special talk was delivered by *Dr Rohit Kohli, Head of the Division of Paediatric Gastroenterology, Hepatology, and Nutrition at Children's Hospital Los Angeles (University of Southern California)* who spoke on *Future directions in Paediatric Liver Transplant* highlighting the reasons that cause liver failure and leads to liver transplantation. Giving an insight into the developments happening at international shores, he mentioned that research is being carried out to find if liquid biopsy can be conducted to look for immune cells in rejection and profile them so that there is no need to conduct a biopsy. Since 50 per cent of children undergoing a liver transplant show signs of rejection in the first year post-transplant and need to undergo a biopsy.

Panel 2 Overcoming challenges to patient care during COVID-19

Moderated by *Dr Neelam Mohan, Director - Department of Paediatric Gastroenterology, Hepatology and Liver Transplantation Medanta Medicity – Gurgaon* Our doctors and experts pointed out that given the recent global crisis patient's safety and health has become crucial. Not only COVID tests are done to ensure the safety of patients

and their caregivers but even doctors have to follow certain protocols to ensure there is no chance of transmission of the infection.

During the initial stages of the pandemic doctors all over the globe were in a dilemma whether they should go ahead with an elective surgery or not. However, addressing this issue

Dr Surender Kumar Mathur, President Zonal Transplantation Coordination Centre Mumbai, Sr Consultant Surgeon GI, HPB Surgery & Liver Transplantation said that if the recipient is COVID positive with the fulminant liver disease it is wise to go for a liver transplant rather than wait for the infection to subside. In fact, timely transplantation would increase the chances of survival even in a COVID positive recipient.

Dr Anurag Shrimal, Lead Consultant – Pancreas & Paediatric Liver Transplantation, Consultant - HPB Surgery, Liver and Pancreas Transplantation Global Hospitals, Mumbai said that even kids who got COVID-19 infection after transplant respond well to steroids and supportive management which goes to say that COVID-19 should not make surgeons put a scheduled transplant on hold.

Dr Bipin Vibhute Program Director, Center for Organ Transplants, Sahyadri Hospitals (Pune, Nashik & Karad) mentioned that surgeons and healthcare workers need to follow the guidelines drafted for safety, like:

- Wearing PPE kits during surgery
- Undergoing COVID test – one before transplant and the one a week after transplant
- Having separate teams to handle COVID cases in the OT and ICU
- Dividing surgeons and health care workers in rotational shifts for surgeries in ICU and OT

Talk- Use of telemedicine & tele-education in times of COVID-19

A special talk was delivered by *Dr Glenn Bonny, Liver, Pancreas and Multi-Organ Transplant surgeon, Research Director- SurgiCAL ProtEomics Laboratory at the National University Hospital, Singapore* who highlighted on *Use of tele-medicine and tele-education* and how these are going to be the next big thing in the medical world given the pace at which they are rapidly changing the medical landscape.

Panel 3 Adapting post-operative care of Paediatric Liver Transplants recipient and donor to the new normal

Moderated by *Dr Lalit Verma, Consultant in Dept of Paediatric Gastroenterology & Hepatology at Wockhardt and Apollo Hospital (New Mumbai).*

Our doctors have concluded that post-transplant to limit transmission of infection, the hospitals have limited intake of patients in the OPDs making them adhere to the given appointments, to avoid crowding, which can increase chances of infection transmission. Unless a patient needs to be checked in person most consultations are done electronically.

WAYS TO MINIMALIZE THE CHANCES OF ACQUIRING AN INFECTION POST-TRANSPLANT

Highlighting some protocols to minimise transmission of infection post-transplant

Dr Subhash Gupta, Founder Chairman of Max Centre for Liver and Biliary Sciences (CLBS) Max Super Speciality Hospital, Saket, New Delhi said:

- Keep the patients for longer than usual in the hospital after surgery to ensure they have no pending issues to be resolved which could necessitate readmission.
- Educate them about medications and doses and explain them to share the progress and medication chart through WhatsApp limiting in-patient consultation.
- Have a local or family paediatrician in the loop throughout the pre and post-transplant phase so that minor health scares can be sorted without coming to the hospital.
- Ensure proper availability of drugs. Instruct medical co-ordinators to be in touch with patients to keep a tab on post-operative progress.

Dr Naresh Shanmugham Director – Women & Child Health, Paediatric Hepatologist and Gastroenterologist, Dr Rela Institute & Medical Centre, Chennai mentioned that post-transplant follow-up done through teleconsultations is safer as it limits exposure and risks of getting an infection. He also feels that for any sample collection the patient should not risk a hospital visit rather take help of the in-house collection facilities of the centres.

Dr Sheetal Mahajani Director – Transplant Hepatology, Department of Gastroenterology, Sahyadri Hospital, Pune said to limit exposure only essential visits are encouraged. Else patients are counselled and monitored over WhatsApp groups and other mediums to limit exposure.

Dr Rajiv Lochan, Consultant Liver, Pancreas and Abdominal transplant Surgeon, Integrated Liver Care Group, Aster RV & Aster CMI Hospitals, Bangalore, pointed out that one of the biggest challenging factors especially in rural India is to keep the donor and recipient isolated from the society as they rely more on social support. However, proper patient education and awareness drives did help during this pandemic.

Panel 4 Opportunities to bring down the cost of Paediatric Liver Transplants for the patient

Moderated by **Mr Ayan Chatterjee, the honorary advisor operations TPAF, Head EDINDIA Foundation.**

Our panellists spoke about ways to make crowdfunding easy and accessible for people in need and how new initiatives can help make liver transplants cost-effective in general.

Dr Shenoy Robinson, Chairperson - CII Technical Committee on Health; Director, Catex Health said that in transplant cases, direct costs involved (cost of surgery, medication and diagnostics) are very high. These can be reduced through third-party interventions like crowdsourcing for tests and medications through NGOs which could bring down costs

attached to post-transplant care in a big way. Commenting on standardising crowdfunding platforms **Mr Anoj Viswanathan, Co-founder and President of Milaap** said that there is a need for crowdfunding platforms to be as transparent as possible so a donor can make an informed decision when it comes to contributing.

Mr Shridhar Hanchinal, Honorable Director of MOHAN Foundation commenting on long-term treatment sustainability said that it is important for pharma companies who play a major role in the transplant space to have patient support programs. This support group should help patient acquire drugs needed and cover diagnostics even if partially. There should also be some perks for patients, like receiving medicines free of cost once, after a period of three or four years. This would make patients adhere to medications and treatments.

Watch the entire event here: <https://www.youtube.com/watch?v=ceLIYAbdbnA>