



## Doctor Speaks

### **India and Children Centric Data on Acute Liver Failure due to Dengue illness.**



Dengue is the second most common mosquito-transmitted disease and the most common arboviral disease globally. 2.5 billion people in 100 endemic countries are susceptible. Increasing urbanization with poor hygiene, dilapidated health systems, increasing international travel fuel the spread of this disease geographically and increase the disease burden of tropics significantly.

Dengue has been found to have profound effect on multiple organ systems, of

which the liver is most commonly affected. The liver involvement can manifest as asymptomatic elevated transaminase levels to acute liver failure (ALF). The hepatic manifestation results from direct viral infection of the liver cells, immunogenic mediated liver damage or due to hypotension - hypo perfusion that occurs in dengue illness.

ALF in dengue illness is reported to have very high mortality rates and earlier this year the first liver transplant for Dengue induced ALF was performed. There is very scanty data on the profile of this illness in children and more so from India. We do not understand and cannot predict that which children having Dengue illness would go on to develop ALF or have asymptomatic elevated transaminase levels only. This bit of information is critical to decrease the mortality associated with Dengue and would help up to triage patients better.

We, at the service of paediatric hepatology and gastroenterology in the Centre of Biliary Sciences - Max Hospital, Saket, New Delhi designed a study to identify factors that predict mortality in children developing ALF due to Dengue illness.

In a duration of one year we had 15 children with Dengue related ALF. The mortality rate was 8 of 15 despite best possible critical care being given. None of these children received a liver transplant as there is no consensus on the role of LT in Dengue, given that it is a multi-systemic involvement. Among these 15 children we found that higher body mass index, faster rate of elevation of liver enzymes (AST,ALT), elevated ammonia levels and more prolonged prothrombin time were predictive of mortality.

This new, India and children centric data gives us a better insight to triage, prioritise early ICU care, prognosticate and probably plan a liver transplant for.

## **Beneficiary Speaks**



**Ritwik Rastogi, 8 years, Badayun, Uttar Pradesh**

*"We didn't know our child will need such a major operation"* says Ritwik's mother. Ritwik was a healthy child, brilliant in studies and used to play many games when he suddenly developed acute liver failure. The rate of liver disease progression was so rapid that he had to undergo a urgent liver transplant within the next 24 hours for him to survive.

It all started with a bout of increased vomiting and stools in mid-October for which he was seen by doctors and pediatricians in and around the small town of Badayun. Ritwik was diagnosed with Jaundice and over days his bilirubin levels increased to more than 20mg/dl. Weakness set in and his food intake also dropped over this period. He was referred to Max Hospital when his INR was very high and his consciousness started decrease.

It was a late evening in early November that Ritwik came to Max Super Speciality Hospital, Delhi. He was diagnosed to be having Acute Liver Failure. The liver was beyond repair, self-healing and an emergency transplant was the only life saving option. Coming from a humble background, arranging 14-16 Lakhs overnight was an arduous task that the family now faced. The parents were in a desperate situation to save their child, knew a treatment option

existed and were majorly short of funds - the situation that no part should ever be in! The service of pediatric hepatology at Centre for Liver and biliary sciences, Max hospital - urgently approached TPAF for support in the middle of the night. With the reassurance of TPAF and Milaap together, the funds were quickly raised. Ritwik's mother donated a part of her liver and the transplant was performed the very next day, within 24 hours of arrival at the hospital. Post transplant Ritwick made a dramatic recovery and was discharged from the hospital within 3 weeks.

Discharged post-transplant, his parents say *"it is his re-birth"* and they are ever grateful to everyone who made it possible. It was a calamity that struck them with a speed that they could even not realise what happened and the speed at which help came forward has left them with a new trust on mankind and hope.

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## In News

This story began with a contribution and then an observation. Last month, I made a donation towards a child suffering from end-stage liver disease on a leading crowdfunding platform. I was soon inundated with emails and online adverts from various platforms seeking contributions for children suffering from terminal illnesses.

[Read more »](#)



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## Current Updates



### **TPAF Patient Support Group Meeting- Mumbai**

TPAF is initiating the formation of patient support group in city of Mumbai. The first support group meeting will be conducted in Mumbai in the month of February 2020 for patient families from western part of India. The meeting will be a platform for pediatric liver transplant patient families to interact with a panel of expert liver surgeons,

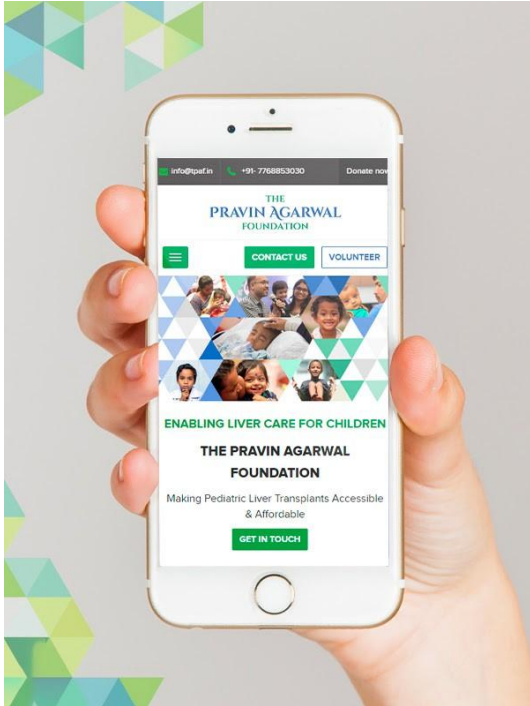
hepatologists, dietitians and pediatricians, take their views, ask questions to the panel, share and learn from the experiences of other fellow patient families who have gone through this journey.

### **TPAF Mobile Application launching soon**

The Pravin Agarwal Foundation has developed a mobile application to make the entire pediatric liver care ecosystem available to maximum people. The application will have forms, dashboards and insights for Hospitals, Patients, NGO partners and community at large.

The mobile application will serve the following objectives:

- Make the Hospital Partner onboarding process easier
- Make the Patient funding request, approval and disbursement process easier
- Track beneficiaries pre and post-transplant and patient support activities
- Provide handy information on liver care, diseases, transplant to different stakeholders
- Provide option to users to pledge for organ donation



## **Apply for Financial Assistance**

children up to the age of 18 years can avail financial assistance for liver transplant by filling out the form on our website and or call us on 7768853030

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