

**India's first living related liver transplantation was carried out at the Indraprastha Apollo Hospital, New Delhi on 15th November, 1998 by the transplant team comprising surgeons Dr M R Rajsekar and Dr A S Soin and Paediatric Hepatologist, Dr A Sibal.**

# Transplanting Life and Hope

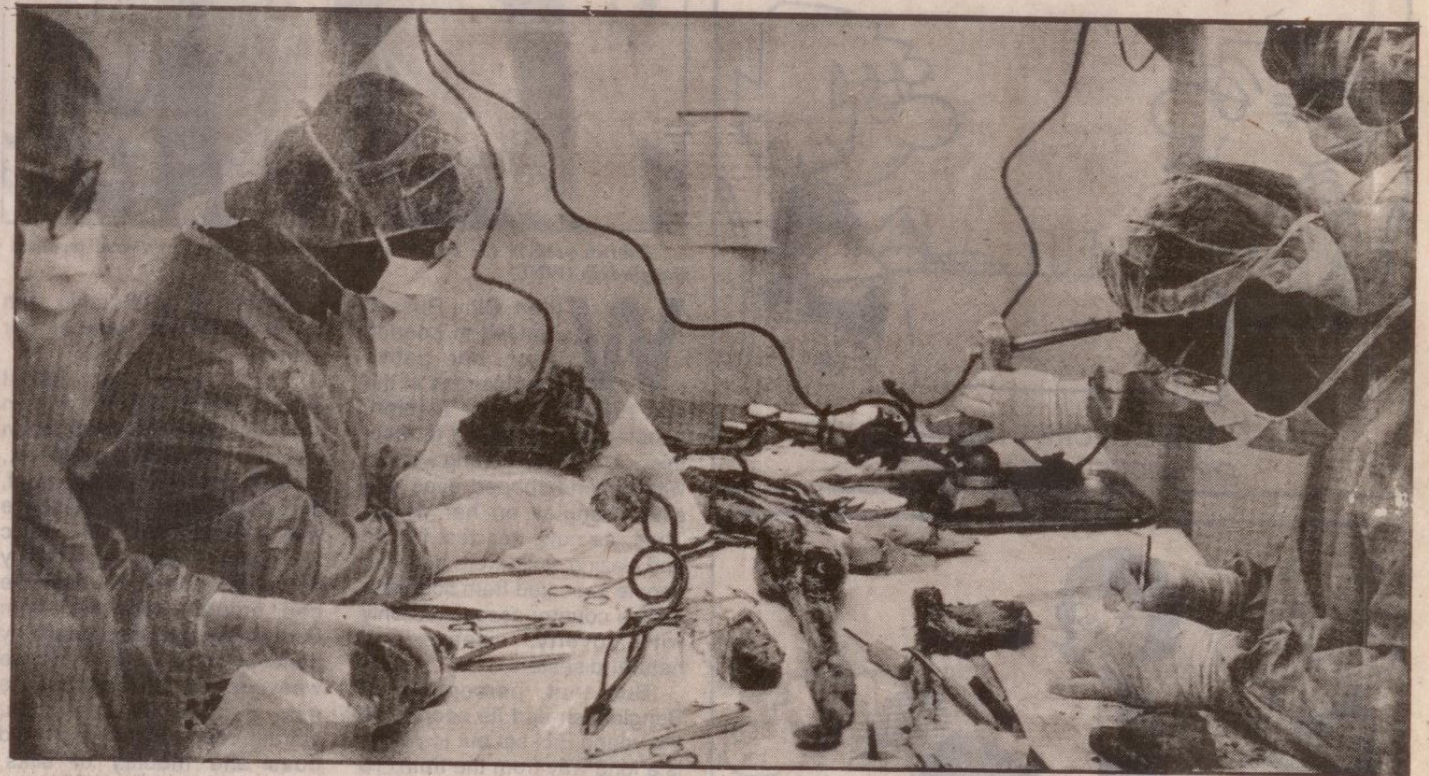
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transplantation the liver from a brain dead donor is used. Either the whole liver or half of it (the liver has two halves) or a segment of the liver is used to replace the child's (recipient) liver. The type of operation performed depends on the difference in size between the donor and the recipient. The problem with cadaver liver transplantation is that very few donor livers are available. In a country like India, where organ donation from a brain dead person received legal sanction four years ago (Transplantation of Human Organs Act 1994) only a handful of organ donations have taken place.

To overcome the shortage of cadaver donors the concept of living related liver transplantation was developed. Here a part of the parent's or first degree relative (blood group compatible) is removed and the child's liver is replaced by it. As the liver has an amazing capacity to regenerate, the donor's liver regrows as does the part transplanted in the child. Several hundred such operations have been successfully performed.

A liver transplant is one of the most major forms of surgery. The decision who to transplant, when to transplant, how to transplant requires a multiple disciplinary medical team with the hepatologist and surgeon making joint decisions. Before the transplant the family receives intensive counselling about the procedure, complications and quality of life after the transplant. Once the family agree for a transplant the child is placed on a waiting list. The medical team ensures that the child remains in the best possible health. It has been proved that early transplantation before establishment of life threatening complications is more successful than late or emergency transplantation.

The transplant operation usually lasts 6-8 hours. The child is transferred to the intensive care unit for careful monitoring. Over the next few days as the child recovers from surgery he is transferred to the ward. In uncomplicated cases, the child is discharged in two weeks. The complications that might occur are failure of the new liver to work, blockage of blood vessels supplying the liver, rejection of the new liver by the immune system and infections.



As better understanding of the mechanisms of rejection of transplanted organs has developed, rejection can now be better controlled. However, at present the child will require life long medication (in the form of a syrup or tablet daily) to prevent rejection. Most children grow and develop normally and infact catch up with their peers. They attain nursery and school regularly participating in normal physical activities. They attain normal pubertal development (pregnancies have been documented). The success rate of liver transplantation is 80%-90% at present

The coming years will see further developments in this area

so that mortality is decreased, rejection is prevented and the overall success rate is enhanced. Already, the age at which a baby can undergo transplantation has decreased dramatically with a five-day-old baby being the youngest recipient. If Indian children are to benefit from liver transplantation, it is essential that more and more people come forward and pledge their organs for donation. Only then can the smile come back to a family with a child who faces certain death from liver failure.

**Dr. Anupam Sibal**

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# EXPRESS Newsline

## Transplanting Hope

**R**ANI JETHMALANI was fortunate that she found a liver donor on December 19, 1997, when she was almost given up for dead. Hepatitis C had led to cirrhosis of Jethmalani's liver and with no transplant facilities available in India, she was forced to head to the US in search of a donor. She was unsuccessful, but a chance stopover in England on her way back made a difference of life and death for her. Some friends forced her to register at King's College Hospital, where she waited for a donor for four months. "Just when I had given up hope and my family had arranged for me to be flown back home to India, I was told they had found a donor," she recalls.

Excellent liver transplant facilities may be available, but lack of donors and funds keep it out the reach of most people, says **SANCHITA SHARMA**

Most other Indians are not as lucky. We need about 10,000 liver transplants in a year, but only eight were performed in the last year and a half, informed Jethmalani at the launch of Liver Transplant Support Group to educate, and inform people about the disease. Which means all the other people who could have been saved were allowed to die.

Now that three successful liver transplants have been performed at Apollo Hospital by A. S. Soin and M. R. Rajasekar, both Senior Consultants, Transplant Surgery, Indians can get treated at home at a fifth the cost. "You need at least Rs 50 lakh for a liver transplant surgery abroad as you may need to wait indefinitely for an organ donor, but in India, you can get operated at a fifth the price." Liver transplants at Apollo cost Rs 10 to 12 lakh.

Once the operation is over, the re-

ipient can lead a normal life, though care has to be taken to keep the environment infection free, particularly in the first three months. Jethmalani continues her active practice as a lawyer, as does Sanjay Kandasamy, the two year old baby who was operated in November last year at Apollo Hospital. "Sanjay eats and drinks normal food, and the very fact that he is not living on mineral or boiled water proves how well his liver is functioning," says Anupam Sibal, Consultant Paediatrician, who helped with the baby's operation.

So active are both Jethmalani and Kandasamy that most people can't tell that they have to remain on immunosuppressants for the rest of their lives. "Monthly medication after the surgery costs anything between Rs 5,000 and Rs

6,000 all through my life," says Jethmalani. "The operation itself is expensive, and with no health insurance, most people find it difficult to go for an operation." Health insurance, with the state subsidising the cost of implants, is something that should be actively considered, she suggests.

More than the cost, the major deterrent is lack of donors. Of the eight operations performed in the past 18 months, four were from cadaver transplants and four from live transplants. Live donors have to donate 30 to 50 per

cent of their liver, depending on the age, size and weight of the recipient. The donor is kept in the hospital for a week and his liver regenerates itself in five to six months.

Ignorance, more than anything else, is what keeps donors away. "Over forty people die on the Delhi roads every month, and if even half of them would pledge their organs, the lives of 240 people would be saved," says Jethmalani. For one person can save six lives by donating his eyes, heart, liver and kidneys. Since the Organ Transplantation Act

HARISH TYAGI



Rani Jethmalani, Sibal, Rajasekar and Soin with Sanjay and his mother

### CIRRHOSIS CHECKLIST

Hepatitis B and C, along with alcohol abuse, are the three major causes of cirrhosis of the liver, which results in its complete degeneration. The symptoms to watch out for are:

- Water retention, which often results in swollen body and feet.
- Extreme inertia, fatigue.
- Jaundice, with the yellowing of the skin and eyes.
- Low-grade fever.
- Darkening of skin.
- Severe backache.
- Loss of appetite.
- Itching and bleeding spots on the skin.
- Spotting and vomiting blood.
- Mood changes.

1994 prohibits the procurement of organs from sources other than family, encouraging cadaver transplant should be encouraged more.

Equally important is making immunisation against Hepatitis-B a part of the national immunisation programme and testing blood for the disease at all blood banks. "The disease is spread through the same media as AIDS and is 200 times more infectious than it," says Jethmalani. Now, with a cheaper vaccine for hepatitis B available in India, a national drive against the disease is not impossible.

**Liver Transplant Support Group**  
hotline: 3352570.



# EXPRESS Newsline

**S**OUMYADEEP GHOSH is a very happy six-year-old. Little things make him happy, like the box of chocolates and he stuffed toy he clutches as he sits next to his politico-visitor, Mamata "Aunty", Banerjee to the rest of us. But more than the gaggle of people around him, it's the "whites" of his eyes that fascinate him as he peers into a mirror every now and then.

It may be unusual for a six-year-old to notice the colour of his eyes, but Soumyadeep is special. He's a child who has been on drugs since he was two-and-a-half months old, ever since he was diagnosed to be suffering from biliary atresia, a condition in which bile accumulates in the liver and damages it, as it did the little boy's. The cure: a liver transplant.

But those days of sleepless nights and innumerable journeys to the hospital are just a memory for his parents now. For, on October 12, 1999, Soumya underwent a liver transplant at Indraprastha Apollo Hospital, New Delhi, and is now back on his feet and raring to go. "Those days were tough, but both of us derived strength from our son who smiled through all his pain," says Mousami Ghosh, Soumya's mother. His father Shantanu was the one who donated 30 per cent of his liver for the transplant, and thus began



■ Mousami and Shantanu Ghosh with son Soumyadeep: surviving against odds

a very special relationship between the two.

"The operation took nearly twelve hours and it was the toughest period of my life," recalls

Mousami, a chemical engineer who gave up her job to look after her ailing son. "As I stood all alone after both my son and husband were wheeled into the Op-

## Small Wonder

Liver-transplant recipient Soumyadeep Ghosh's parents recall their ordeal before they were told the operation was successful and their son would live. **ABHILASHA OJHA reports**

eration Theatre, I kept wondering whether we'd taken the right decision!" she says, adding, "but I had complete faith in God and this is what helped us take the plunge."

Soumya was born in Calcutta with a liver disorder. When his jaundice refused to go away after

a month, he was referred to Shubir Chatterjee, a pediatrician. "Soumya underwent his first surgery when he was barely two and a half months old," says the proud father.

"Most parents ignore the jaundice in new-borns, but I want to emphasise that if it persists for more than two weeks, then the child should undergo proper check-up," insists Anupam Sibal, Pediatric Liver Specialist, who is one of the team of doctors — apart from surgeons A. S. Soin and M. R. Rajasekar — of the liver transplant team at Apollo hospital.

After his first operation in Calcutta, Soumya recovered very quickly and "was back to being chirpy, naughty and mischievous, like any other boy his age," says Shantanu. But, when he was three years old, "both Mousami and I noticed that his stool colour was pale and his eyes were yellow, and he became very weak." Once again the parents took him to Chatterjee who confirmed that he was suffering from biliary atresia and the only cure was a liver transplant.

"Those were very tough days," says Mousami. "I remember being numb and confused with grief, but when I looked at my son smiling through it all, I knew I had to be strong," she adds. For the parents, it was very difficult to watch their son bat-

tling for his life each day, and this prompted them to take him to Apollo where the liver transplant team decided to help the little boy.

"There was similar case last year in November from Tamil Nadu in which the child suffered from biliary atresia and underwent a successful liver transplant," says Soin, Senior Consultant Surgeon, Apollo Hospital. In India, the cost of such a liver transplant would be around Rs 10 lakh, but Soumya was operated upon free.

Still, they now to bear the brunt of the post-operative treatment which involves the intake of a immuno-suppressive drugs for the rest of his life to stop his body from rejecting the implant. Initially, the monthly expenditure is about Rs 10,000, an amount the Ghoshs can ill-afford. "When compared to our son's life, it's a meagre amount," say the parents in unison. "But there will be a reduction in the intake of the drugs in about a year's time, so we're sure we'll manage," they say optimistically.

They have reason to be hopeful. people have been understanding. Shantanu's been transferred to Delhi by his consultancy firm so that his son can be near the specialists who treated him. And, of course, the free operation happened after they had almost given up all hope.

21<sup>st</sup> DEC 1999

जालन्धर, दिल्ली और अम्बाला से प्रकाशित  
रजि. नं. DL/21004

भारत का सर्वाधिक प्रसारित हिन्दी दैनिक

फोन : 7181133, 7187248, 7182957,

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संस्थापक : अमर शहीद लाला जगतनारायण जी  
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# पंजाब केसरी

खेल-कहानी संयुक्त संस्करण

वर्ष 17 बुधवार, 22 दिसम्बर 1999 तदनुसार 7 पौष, 2056 विक्रमी सम्वत मूल्य 2 रुपए (नेपाल में कीमत 3 नेपाली रुपए)

अंक 354

## बच्चे का जिगर प्रत्यारोपित कर डाक्टर उसे मौत के मुंह से निकाल लाए

हरीश चोपड़ा

नई दिल्ली, 21 दिसम्बर : चिकित्सा विज्ञान में नई-नई उपचार पद्धतियों ने इस सहस्राब्दी में नए आयाम स्थापित किए हैं। उच्चस्तरीय चिकित्सा सुविधाओं के उपलब्ध होने से अब मरीजों को मौत के मुंह से निकाला जा सकता है। राजधानी के इन्द्रप्रस्थ अपोलो अस्पताल के डाक्टरों ने जम्मू के रहने वाले 7 वर्षीय बालक नीतीश में जिगर प्रत्यारोपित कर उसे नया जीवन दिया। सफल जिगर प्रत्यारोपण करने वाले डाक्टरों की टीम में डा. ए.एस. सोइन, डा. अनुपम सिब्बल और डा. एम.आर. राजशेखर शामिल थे। डा. सिब्बल ने बताया कि यूं तो हमने नवम्बर 1998 में जिगर प्रत्यारोपण का पहला सफल आप्रेशन किया था परन्तु 7 वर्षीय बच्चे नीतीश कुमार का जिगर प्रत्यारोपण करना एक चुनौतीपूर्ण आप्रेशन था। क्योंकि अचानक पीलिया का शिकार हुआ नीतीश नीम बेहोशी की अवस्था में चला गया था। पीलिया का कारण हैपेटाइटिस 'ए' के वायरस थे। उसका जिगर पूरी तरह से नकारा हो चुका था और जिगर प्रत्यारोपण के बिना उसको बचाना मुश्किल था। इसलिए तुरन्त आप्रेशन का निर्णय लिया गया और सब कुछ आपात स्थिति में किया गया। नीतीश के पिता रघुपाल सिंह के जिगर का 35 प्रतिशत हिस्सा लिया गया और नीतीश में प्रत्यारोपित किया गया। डा. ए.एस. सोइन ने बताया कि प्रत्यारोपण आप्रेशन की सफलता का आधार बीमारी के समय पर शिनाख्त और समय पर आप्रेशन है। थोड़ा सा विलम्ब आप्रेशन के दौरान अनेक मुश्किलें पैदा कर सकता था और जोखिम बढ़ सकता था। डा. एम.आर. राजशेखर ने बताया कि फिलहाल देश में अंगदान करने के लिए कोई तंत्र विकसित नहीं हुआ है और विशेष रूप से



7 वर्षीय नीतीश जिगर प्रत्यारोपण के बाद अपने पिता रघुपाल सिंह की बांहों में। साथ में जिगर प्रत्यारोपण करने वाले डाक्टर। (छाया : नीरज)

बच्चे में जिगर प्रत्यारोपण के लिए कोई भी बच्चा अपना जिगर नहीं दे सकता। बड़े व्यक्ति का पूरा जिगर बच्चों में प्रत्यारोपित नहीं किया जा सकता। इस स्थिति में और कोई विकल्प नहीं बचता कि बच्चे के खून के रिश्ते के लोगों से जिगर का कुछ हिस्सा ले लिया जाए। इसलिए नीतीश के पिता रघुपाल सिंह ने अपने जिगर का 35 प्रतिशत हिस्सा दिया। उन्होंने बताया कि रघुपाल सिंह का जिगर 8 से 12 सप्ताह के दौरान अपनी पूर्ण स्थिति में आ जाएगा क्योंकि जिगर में अनुपात अनुसार बढ़ने की क्षमता होती है। जिगर की बीमारियों से ग्रस्त मरीजों के लिए भारत में जिगर प्रत्यारोपण महत्वपूर्ण उपचार है। अपोलो अस्पताल में अब

तक 6 सफल आप्रेशन किए जा चुके हैं। डाक्टरों ने बताया कि देश में हर वर्ष लगभग 60 हजार लोगों की लीवर की बीमारियों से मृत्यु हो जाती है। इससे बचने के लिए स्वच्छ भोजन और स्वच्छ पानी का इस्तेमाल जरूरी है। पीलिया की शिकायत होने पर तुरन्त चैकअप कराया जाए तो तुरन्त उपचार से इससे बचा जा सकता है। उन्होंने बताया कि नीतीश के पिता को आप्रेशन के 6 दिन बाद छुट्टी दे दी गई जबकि नीतीश को 3 सप्ताह बाद घर भेज दिया गया। रघुपाल सिंह जिन्होंने अपने जिगर के टुकड़े को बचाने के लिए अपने जिगर का टुकड़ा दिया काफी खुश है क्योंकि नीतीश को नया जीवन मिला है।

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