

Pediatric liver transplantation in India turns 12

The importance of the liver and its health cannot be adequately underscored as the liver plays a crucial role in several functions of the body. Maintaining a healthy liver is, therefore, of utmost importance.

About Liver

The liver is the body's largest organ, weighing about 1500g in adults. The liver performs many complex functions in the body, including producing most proteins needed by the body, metabolizing nutrients from food to produce energy, preventing shortages of nutrients by storing certain vitamins, minerals and sugar. It also produces bile which is needed to digest fat and to absorb vitamins A, D, E and K. Certain proteins that regulate blood clotting are also produced in the liver. It helps our body fight infections. It also participates in removing potentially toxic byproducts of several medications. It performs numerous functions that are essential for the well being of the body.

Liver Transplant

The liver stops functioning adequately due to a variety of diseases and infections. This leads to liver failure. The only definite treatment for liver failure is liver transplantation. During a liver transplant, the diseased liver is removed and replaced with a healthy one. "Two types of liver transplant are possible: living donor transplant and cadaveric transplant. In a living donor transplant, a portion of liver from a healthy person is removed and placed into the patient. Since the liver has the capacity to regenerate, both the donor and recipient liver portions grow to a normal size in a few weeks. The donor is usually a blood relative or spouse.

World Liver Day



Dr. Anupam Sibal

Blood type and body size are critical factors in determining who is an appropriate donor," says Dr Anupam Sibal, Senior Consultant, Pediatric Gastroenterology & Hepatology, Indraprastha Apollo Hospitals. Dr Vidyut Bhatia, Senior Consultant, Pediatric Gastroenterologist, Indraprastha Apollo Hospitals further adds, "In a cadaveric transplant, the donor is a brain dead person. Such a person is considered dead because his or her brain has permanently and irrevocably stopped functioning. The awareness level about cadaveric donation is still far from satisfactory in India. Hence, the only realistic option in India is living donor transplantation."

Life after liver transplant

Two of the common complications following liver transplant are rejection and infection. Anti-rejection medications called immunosuppressants are given to protect against the immune attack which must be taken for life. Because anti-rejection drugs are needed to prevent the liver from being rejected, the patient is at an increased risk for infections. This problem diminishes as time passes. Not all patients have problems with infec-

tions, and most infections can be treated successfully as they occur. "The average hospital stay after liver transplant is two to three weeks. Most patients return to a regular lifestyle within three to six months after a successful liver transplant. Children develop and grow normally and participate in activities just like other children. Girls who have had transplants have gone to develop normal pregnancies and have delivered healthy babies. Nearly 85% of liver transplant patients are alive 10 years after their transplants," says Dr Subhash Gupta, Senior Consultant, Liver Transplant, Indraprastha Apollo Hospitals. In children, the most common reason for needing a liver transplant is biliary atresia. In biliary atresia, the bile duct connecting the liver to the intestine is missing. As a result, bile collects up in the liver and causes cirrhosis. About 50% of all liver transplants in children are due to biliary atresia.

Liver Transplant & Indraprastha Apollo Hospitals

Indraprastha Apollo Hospital set up a dedicated liver transplant unit in the year 1997. Indraprastha Apollo Hospitals created history by performing the first successful liver transplant in the country on 15 November 1998.

"In the last 12 years, Indraprastha Apollo has performed 500 pediatric and adult transplants (251 in the last 23 months). The cost of a liver transplant has come down considerably following increased number of transplants being performed. Nowadays, the average cost of a transplant in a child is between Rs 12-15 lakh. We have transplanted patients from 16 countries. As we celebrate the 12th anniversary of India's first successful pediatric transplant, we can say with pride that today we can offer hope to children with liver failure," says Dr Anupam Sibal, Senior Consultant, Pediatric Gastroenterology & Hepatology, Indraprastha Apollo Hospitals.

By Dr. Anupam Sibal, Dr. Subash Gupta, Dr. Vidyut Bhatia, Apollo Hospitals Delhi