# **For International Patients**

#### An Overview

Since its inception BLK Super Speciality Hospital has been a preferred destination for International Patients seeking specialised healthcare services in India. The Hospital has attended to the healthcare needs of thousands of global citizens from South East and Central Asia, Middle East, Africa, Europe and North America. The Hospital is very conveniently located within a 30 minutes drive from the international airport and next to a well known Metro Station in Delhi, allowing patients and their attendants an ease of access and local commute during their stay in India. There is a dedicated lounge for international patients with facilities for communication assistance with physicians, family and friends at home, via free internet access. The Hospital has a team of in-house interpreters trained in multiple languages who assist the patients throughout their visit to BLK.

The Hospital offers personalized services to overseas patients including query handling, identifying physicians in advance to meet the patients' specific needs, coordination for Doctor's appointment and surgery, VISA and FRRO assistance, airport pick-up and drop facility, currency exchange facilitation, mobile & calling card arrangements, organizing accommodation for the attendants and patients' families within the vicinity of the Hospital, cuisine of the patient's choice, travel, tour & ticketing assistance, and post discharge follow-up.

BLK Super Speciality Hospital has a dedicated team for International Patient Services. This well-trained dedicated team takes care of all clinical and administrative requirements of patients & their companions coming from overseas. A personal coordinator / case manager is assigned to each patient, and is responsible for taking care of all aspects of patients' visit to India, ensuring that they feel at home at BLK. The services are focused on meeting the special needs of the patients and their families, before, during & after their visit.

#### **International Patient Management**

**BLK International Services Co-ordinators** Ensuring the best of clinical services for you, BLK has a care management team of experienced nurses and senior super specialists. This team works closely with the international services coordinator. **Patient Education** The care management nurse constantly educates and updates patients on their condition and improvements. She holds the educational sessions & informs the patient and attendants on future course of action. **Discharge** Once your attending doctor

announces the Discharge, The nurse will make the discharge plan with other members of the BLK's international team. The team take care of your needs while finalizing the discharge. The International patient services team ensures that at the time of discharge you receive the right information and education, available translated materials, all consolidated bills. The team will also discuss & plan your follow-up visits and future treatment needs in your home country. **Clinical Equipment** The team will arrange for you all the necessary clinical equipment, such as a Stretcher, a wheelchair, Crash cart or oxygen, required by you outside of the hospital. Ambulance Transportation If you cannot commute on a normal vehicle & need a medically equipped vehicle, the care management team will arrange an ambulance. May I help you? In case you have any (medical/ non medical) queries, Please contact your international care executive & they will be happy to help you. strong>Your Billing GuideThe International patient services team will help you with all kind of financial Information like preparing estimates, understanding the bills, provisional bill generations, arranging foreign exchange and verifying insurance coverage vis-a-vis BLK policies and collecting payments. Admission Procedures

- Request from patients is received with brief history and current medical problem and treatment.
- BLK Super Specialists from will work on it and provide relevant treatment information to the patient.
- Counseling of the patient done by BLK expert for the appropriate treatment / package.
- Appointment scheduling with the concerned doctor/physician.
- Confirmation of date and time of arrival by the patient
- BLK team will organize Accommodation/Hotel Booking
- Airport pick up facility by BLK International Executive/ team, and will be provided with the required assistance.
- Admission of patient with planned treatment at BLK.
- Patient is being discharged after the proper treatment
- At the time of discharge patient is advised by the doctor for follow up assistance for future appointment scheduling after discharge.
- Airport drop facility

# **Liver Transplant Surgery**

Liver is an essential organ of the body as it supports the purification of blood as well as fight infections. Also, it helps in storage of food and storage of energy. Liver failure is the sole reason behind the Liver transplantation. Major causes of liver failure are Alcoholism, Liver cancer, Liver cirrhosis and other.

## Why Liver Transplant?

- Liver transplantation is performed to replace the diseased liver with a healthy one from another individual. The liver may come from a deceased organ donor or from a living donor. Family members or individuals who are unrelated but make a good match may be able to donate a section of their liver. This type of transplant is called a living transplant. Individuals who donate a portion of their liver can stay healthy with the remaining liver.
- A whole liver may be transplanted or may be just a section, depending upon the
  condition. Since the liver is the only organ in the body which can reconstruct
  itself, a transplanted portion of liver can rebuild itself back to normal capacity
  within weeks.

#### **BLK Hospital Merits In Transpalntation**

- BLKs Liver Transplant Program has a long tradition of outstanding outcomes. We offer expertise in treating adult patients as well as children with liver failure seeking liver transplantation; the Division also provides comprehensive multi disciplinary team management of other complex hepatobiliary disorders, such as liver tumors, Hepatitis C, biliary strictures, and portal hypertension.
- BLK's multidisciplinary team of surgeons, hepatologists, oncologists, radiologists and other specialists offers patients state-of-the-art care and a comprehensive approach to liver and biliary disease.
- A dedicated in-patient unit provides standardized pre- and post-transplant care.
   An active support group for patients who are awaiting transplant and who have undergone transplant is also supported by the Division and also provides follow-up care to patients transplanted at other centers.
- Our goal, first and foremost, is to comprehensively evaluate the needs of each patient and to develop an individualized treatment plan that leads to the best possible outcome. We emphasize timely treatment to help avoid advanced complications due to liver disease or liver/bile duct cancer.

**Our Recent Achievements:-** An Air Marshal during Saddam Hussein's reign, 63-year-old Iraqi national Abdul Karim Darvesh recently got a new lease of life after doctors here carried out a liver transplant on him. "They greet the patients in a very warm manner and treat them with utmost care." Says Mr. Darvesh.

## WHO NEEDS TRANSPLANT

In general, patients of liver cirrhosis with an estimated survival of

Patients with known predisposing cause of liver disease (like history of alcohol abuse, hepatitis B or C) or any otherwise healthy person with these symptoms should get himself evaluated by a qualified gastroenterologist or hepatologist. Once the disease is established, its stage is assessed through various scoring systems common ones are Child's Pugh Scoring and MELD scoring and requirement of a liver transplant is assessed. Not all patients with end stage liver disease are fit to undergo a liver transplant. Once a transplant has been advised patient has to undergo evaluation for his fitness for liver transplant. Fortis group runs evaluation centres at all of its branches in Delhi & NCR for basic evaluation of patients for liver transplant.

Apart from liver cirrhosis which is a long standing or chronic disease, liver transplant is sometimes also indicated in other conditions like Acute or Fulminant liver failure (Sudden liver failure within days), hepatocellular cancer (liver cancer) or various in-born errors of metabolism (tyrosinemia, urea cycle enzyme deficiencies etc).

Among these acute liver failure or fulminant liver failure is an emergency condition in which there is sudden liver damage leading to liver failure and coma. Transplant in this condition is an acute emergency and has to be performed as early as possible (within hours of development of coma) to avoid development of permanent brain damage. Any delay implies poor outcome.

## LIFE AFTER TRANSPLANTATION

Liver transplant offers better quality of life and extends life expectancy. About 90% patients survive after one year and 80-85 % survives till five years. Patients have to visit hospital at intervals and take Immunosuppression drugs lifelong. They are required to have follow up visits weekly for first 2 months for examination, drugs doses adjustment and assessment of liver function and thereafter every months or so. They can do physical activities as a normal person after 3 months. Survival after liver transplant depends on many factors like patient's initial condition, disease for which transplant is being done, other associated disease and so on. Longest survivor of liver transplant at present is of 27 years. Both no one can guarantee who is going to live for how long. It varies from patient to patient. Family support is very crucial to live active and productive life.

#### **COMMON LIVER AILMENTS**

## Viral Hepatitis

Hepatitis C: Discovered in 1989, it was a major cause of post transfusion hepatitis prior to 1992. It is a major cause of liver cirrhosis and hepatocellular carcinoma worldwide. There is fourfold increase in number of patient in last decade with a prevalence of 0.8%. Acute hepatitis C is usually subclinical occurs in 20% of cases with nonspecific symptoms. Jaundice occurs in only 20-30%. HCV RNA can be detected in blood within 1-3 weeks after exposure. Mode of transmission is similar to Hepatitis B infection. Diagnosis of chronic hepatitis C is by serological testing in form of anti HCV antibodies and HCV RNA in high risk subjects as in those who have unexplained elevated liver enzymes. Serological tests are false negative in immunosuppressed and chronic dialysis patients. HCV genotype and viral loads are necessary before treatment. When chronic hepatitis C is diagnosed then immunization against hepatitis A and B and avoiding of alcohol is advised. Those who develop cirrhosis with or without superimposed liver cancer needs liver transplantation.

## **Organ Donation**

Organ donation takes healthy organs and tissues from one person for transplantation into another. Experts say that the organs from one donor can save or help as many as 50 people. Organs you can donate include:

- Internal organs: Kidneys, heart, liver, pancreas, intestines, lungs
- Skin
- Bone and bone marrow
- Cornea

People of all ages and background can be organ donors. If you are under age 18, your parent or guardian must give you permission to become a donor. If you are 18 or older you can show you want to be a donor by signing a donor card. You should also let your family know your wishes.

#### KNOW YOUR LIVER

#### What makes a Liver diseased?

- -Sudden or acute failure from infection or drug. (ACUTE OR FULMINANT LIVER FAILURE)
- -Chronic long-term failure due to:
  - >>Ongoing infection (Hepatitis B, Hepatitis C)
  - >>Repeated injury due to persistent elevation of bilirubin. (Biliary Cirrhosis)
  - >>Alcoholism
  - >>Autoimmune disease
  - >>Errors in Metabolism
  - >>A liver with cancer (primary liver cancer)

A liver normally has a great ability to heal itself and it can overcome most insults it encounters, such as heavy alcohol ingestion or viral infection. In fact, it is the only organ in the body, which has regenerative capabilities. Occasionally, the liver is so devastated by the insult that all of its cells are destroyed and there are not enough left to regenerate.

Some insults are chronic and can lead to scar formation replacing normal liver cells. Some scar formation on the liver can be tolerated but is not reversible. When all normal liver tissue is replaced by scar tissue, this is referred to as cirrhosis of the liver. Liver cirrhosis can occur from a variety of causes. Alcohol abuse or continued exposure to a

virus can cause liver cirrhosis. High levels of bilirubin can occur in children with congenital absence of the bile ducts known as biliary atresia. In adults, primary biliary cirrhosis, sclerosing cholangitis or continual high levels of bilirubin can eventually lead to liver cirrhosis.

Two problems arise as a result of cirrhosis of the liver. First is a loss of biochemical function of the liver. This includes functions such as clearing waste products from the blood stream, making proteins necessary for growth, development and body maintenance. The abnormalities are a result of the liver's inability to perform functions at the cellular level. This can result in any or all of the following conditions:

- 1. Encephalopathy, which is decreased mental functions ranging from fatigue to confusion or coma.
- 2. Coagulation defects, which result from inadequate supplies of proteins to produce clotting factors. This can lead to significant bleeding.
- 3. Malnutrition, weight loss, muscle wasting and chronic fatigue result from decreased ability to process nutrients appropriately.
- 4. The immune system may be impaired as a result of liver failure leading to potentially severe infections.

The second problem that arises is an increased resistance of the flow of portal vein blood through the liver as a result of the scar formation in the liver. This can lead to several potentially life-threatening conditions. The blood that bathes the intestines and absorbs nutrients as they are digested in the gut is the portal blood, which collects in the portal vein and then passes through the liver. This results in a high pressure developing in the portal vein system, causing enlargement of the blood vessels draining the intestines. These enlarged vessels, known as varices, are fragile. The vessels in the oesophagus (food pipe) can become eroded and massive and bleeding can occur. The high pressure in the veins in the abdomen also causes plasma to leak from the blood vessels and into the abdominal cavity where it accumulates. The fluid is known as ascites. Both variceal bleeding and ascites are a result of a mechanical problem causing high pressure in the portal vein. If liver function is not too impaired, the pressure in the portal vein can be relieved with an operation. In this operation portal blood is diverted through a shunt from the portal vein directly to the vena cava without having to pass through the liver first. This decreases the pressure in the portal system. Ascites and varices are no longer a problem as long as the shunt stays open. However, in most patients with cirrhosis, liver function is too poor and diverting the portal blood from the liver deprives it of its nutrients leading to further deterioration in liver function.

In liver cirrhosis when any or all these features (Encephalopathy, Ascites, Variceal bleeding, coagulopathy) occur it is often called as END STAGE LIVER DISEASE or END STAGE LIVER FAILURE. In the setting of END STAGE LIVER FAILURE, liver transplantation becomes necessary.