# Hep C Factsheets Liver transplant



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### Introduction

It should be remembered that few people with hepatitis C will ever require liver transplant - less than 1 in 10. The following information is provided for general interest only. If you feel you want more information about liver transplant, please speak to your GP, specialist or contact the Australian National Liver Transplant Unit, Royal Prince Alfred Hospital (02 9515 7275).

### Assessment

Prior to liver transplant a person will be monitored by their doctor or specialist. This is important as the operation is best undertaken when a person first experiences chronic liver failure - as opposed to the later stage of terminal liver failure.

When the effects of chronic liver failure begin to develop, a person is admitted to Royal Prince Alfred Hospital (RPAH) for a five day "assessment for transplant". Assessment generally involves the following: blood tests including haematology, cross-matching, tissue typing, hormone levels, hepatitis, CMV and HIV; X-rays including chest, bones and liver blood supply; CT scans of the bones and liver; and an ECG.

### **Basic requirements**

As a general rule, there are four basic requirements which indicate someone is suitable for transplant:

- irreversible, progressive liver damage,
- a non-response to all other forms of medical and surgical treatment,
- absence of other major diseases, and
- ability to understand the nature and risks of liver transplantation.

People being assessed are visited by eleven different healthcare workers and are offered the opportunity to meet with someone who has already had the operation.

#### **Assessment results**

Final assessments fall into three categories with people being reminded of their right to choose NOT to undergo the operation:

- suitable for immediate transplant,
- suitable for future transplant (this may be months or years away), and
- not suitable for transplant (usually because of a high chance the person would not survive the operation).

# Waiting

Once accepted onto the waiting list, a person needs to be contactable 24 hours a day, seven days a week. Whilst on the waiting list people need to attend RPAH for regular blood tests. During this time, the hospital awaits a suitable donor organ. A liver donor has to be someone who has suffered brain death (e.g., from a motor accident or a brain haemorrhage).

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## Preparation

When a suitable donor has been found, a person is contacted and asked to immediately travel to the hospital. The person is advised to travel with one family member and must not eat or drink once they receive the phone call. Being called in to the hospital doesn't necessarily mean the operation will proceed. A person may make several such trips.

# Surgery

The transplant is very complicated and takes around eight hours. Removing the old liver can be extremely difficult, particularly if someone has had previous abdominal operations.

Transplants typically involve the severing and reconnecting of five vital structures: the major veins that drain into the heart, both above and below the liver; the vein that feeds food enriched blood from the intestines into the liver; the hepatic artery; and the bile duct, the major duct carrying bile from the liver to the intestine.

### Rejection

A person's immune system recognises the transplanted liver as foreign and will try to destroy it. Nearly all patients will experience one or more episodes of rejection and it most commonly occurs 7-10 days after surgery.

Doctors combat rejection by lowering the body's immune response through the use of anti-rejection drugs. For the rest of their lives, people remain on these drugs which, unfortunately, have significant side effects. This ongoing treatment involves a careful balancing act decreasing the immune response just enough to prevent rejection, but not so much that the body is in unnecessary danger of general health infections.

Because people are at an increased risk of general health infections (particularly in the first months following their transplant), care needs to be taken to avoid infections that most people take for granted. Things like: the flu, colds, cuts and grazes, cystitis, cold sores, etc.

# **Return of hepatitis**

After the transplant, the new liver will be affected by hepatitis C virus in the bloodstream (it would also be affected by hepatitis B if a person has that virus). The hepatitis C does not usually cause liver problems for at least 5 years. Return of hepatitis B related liver damage can be particularly severe and it's hoped that current experimental drugs can address this problem.

# **Emotional impact**

The operation involves considerable physical and emotional shock. It is a tense, anxious time for both patients and family alike. Along the way, there will be significant emotional distress connected with the operation itself as well as the drugs and medications involved.

### Also see

Blood & Organ Donation (factsheet)

• Abridged from *Information Manual for Liver Transplant Recipients and their Families,* Australian National Liver Transplant Unit (1996).