

USC ABDOMINAL TRANSPLANT PROGRAM
Live Donor Liver Transplantation

Live donor liver transplantation (LDLT) is a procedure in which a living person donates a portion of his or her liver to another. The feasibility of LDLT was first demonstrated in the United States in 1989. The recipient was a child, who received a segment of his mother's liver. Since that time, LDLT for children has enjoyed wide success and many pediatric programs use this technique. In the pediatric experience, survival of both the recipient and the transplanted liver (graft) at 1 year is about 90%. Donor complications have been very few. A rising population of adult patients awaiting liver transplantation has led to the application of LDLT for adult patients and the preliminary results have been very encouraging. Only a handful of centers in this country perform the procedure.

The transplant team from USC has been performing LDLT at the Children's Hospital of Los Angeles (CHLA) for some time with excellent results. This USC team also performed the first adult-to-adult LDLT in Southern California, and the world's first adult-to-adult LDLT without a blood transfusion. Encouraged by these results, we now offer this option as standard treatment in adults who have suitable donors.

This brochure is designed to provide you information about the USC Liver Transplant Program. It also answers the following questions: 1) What constitutes a good donor? 2) What is the process for evaluating and selecting a donor? 3) Where does the transplant occur? 4) When does the transplant occur? 5) How is the operation performed? 6) What is the postoperative period like for the donor? The information presented in a question and answer format is intended to address all the usual questions that arise when considering this option.

Basic facts regarding the Recipient:

- Patients being considered for LDLT are those who are candidates to receive a cadaveric liver (liver from non-living, unrelated individual) based on the severity of their liver disease and its complications. These patients are placed on the liver transplant waiting list and will not be denied a donor liver if it becomes available prior to LDLT. Thus, failure to find a suitable donor for *LDLT* will not jeopardize the recipient's chances of receiving a cadaveric liver.
- Patients considered for LDLT will be followed by the same USC liver transplant team who will manage all complications of liver disease with a view to optimizing the patient's condition prior to liver transplant.

Basic facts regarding the donor:

- The donor could either be a relative (close or distant) or even be unrelated.
- The blood type of the donor should be compatible the recipient's.
- The donor should be in good physical and mental health.
- The decision to be a donor should be made after careful consideration of facts and knowledge of the procedures, the risks and complications.
- There should be no evidence of financial gain arising out of the donation.
- The donor must be relatively close in size (or larger) than the recipient.

USC ABDOMINAL TRANSPLANT PROGRAM
Live Donor Liver Transplantation

What constitutes a good donor?

- A good donor is someone who is in good physical and mental health, older than the age of 18 and free from:
 - HIV infection
 - Known viral hepatitis
 - Active alcoholism with frequent and heavy alcohol intake
 - Psychiatric illness under treatment
 - History of malignancy
 - Heart and lung disease requiring medications
 - Diabetes mellitus of greater than 7 years duration

What is the process for evaluating a donor?

- The potential donor will be asked to complete a questionnaire that includes attaching a copy of his or her blood type (to confirm whether this is compatible with the recipient).
- If the *blood type is compatible with that of the recipient and the details on the questionnaire indicate suitability*, the donor is evaluated by a hepatologist (liver specialist) and a liver transplant surgeon who will obtain additional history, perform a physical examination and administer appropriate blood and urine tests.
- If the physical examination and laboratory tests confirm that the donor is suitable and if the donor's size (height/weight compared to that of the recipient) is appropriate, a MRI scan will be arranged to calculate the volume of liver that will permit a successful outcome. A chest x-ray to evaluate the lungs and an EKG to evaluate the heart will also be performed to help in determining if the potential donor is healthy for donation.
- The potential donor will also be interviewed by a social worker from our team. Under some circumstances, a psychiatric evaluation may be appropriate.
- When complete, the medical and social details of the evaluation are discussed at a conference by the transplant team members. A decision regarding the suitability of the donor will be made at that time. This decision will be communicated to the donor by one of the team members (usually the transplant coordinator). If not selected, a physician team member can be contacted for an explanation. **[All information concerning the donor is kept in strict confidence.]**

Where does the transplant occur?

- All adult liver transplants are performed at the USC University Hospital.
- Pediatric liver transplants are performed in conjunction with Children's Hospital Los Angeles. Adult donor surgery is performed at USC University Hospital.

USC ABDOMINAL TRANSPLANT PROGRAM
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When does the transplant occur?

- The transplant is scheduled at a mutually convenient time for the donor and recipient. In the case of the latter, the team members will decide the optimal time based on condition of the recipient and control of complications. For example, if the recipient develops a sudden fever, the procedure will be delayed until the cause is found and potential infection controlled.
- The advantage of LDLT is that the procedure can be timed in such a way as to perform the procedure on both the donor and recipient when both are in the best possible condition.

How is the operation performed?

- After all of the medical issues have been settled and the donor-recipient match-up is completed, a date is selected for the operation.
- Two teams perform the donor and recipient operations simultaneously.
- As the diseased liver is removed from the recipient by one team, the other team removes approximately half of the donor's normal liver.
- Once the donor operation is completed, both surgical teams complete the transplant by inserting and attaching the donor liver into the recipient.
- The donor operation usually takes about 5 hours and the recipient operation about 10 hours.
- Both half-livers (of donor and recipient) grow to be full sized in approximately 6-8 weeks.

What is the post-operative period like for the donor?

- Prior to the transplant procedure, the donor will receive a detailed description of the procedure and will have an opportunity to discuss the potential risks or side effects of the operation.
- The donor is usually in the intensive care unit for about 24 hours and in the hospital for 5-7 days. Most patients are up and out of bed (with assistance) by the second or third postoperative day. It is usually necessary to stay off work and usual home activities for a month full time and 2 to 4 weeks part time, depending on the rapidity of the recovery.

USC ABDOMINAL TRANSPLANT PROGRAM
Live Donor Liver Transplantation

Who are the USC LDLT team members?

Surgery: Rick Selby, M.D.
Yuri Genyk, M.D.
Rod Mateo, M.D.
Linda Sher, M.D.
Maria Stapfer, M.D.
Telephone: 323-442-5908
Fax: 323-442-5721

Hepatology: Tse-Ling Fong, M.D.
John Donovan, M.D.
Fariba Javadi, M.D.
Telephone: 323 -442-5908
Fax: 323-442-5721

Nurse Practitioner: Jennifer Pena, R.N., M.S.N., A.C.N.P.C
Telephone: 323 -442-5908
Fax: 323-442-5721

Transplant Coordinators: Janelle Newkirk, RN (Live Donor Coordinator- Liver donors)
Direct phone# 323-442-5847

Michele Mark, RN (Senior Coordinator- Liver & Kidney)
Evelyn Lee, RN (Post-transplant- Liver recipients)
June Hsieh, RN (Post-transplant- Liver recipients)
Barbara Siepler, RN (Post-transplant- Liver recipients)
Jacqueline Johnson, RN (Pre-transplant-listed liver patients)
Rebeca Gonzalez, RN (Pre-transplant- listed liver patients)
Barbara Nuesse, RN (Pre-transplant- new liver intake/eval patients)
Anita Harper Chan, RN (policies, special projects)
Telephone: 323-442-5908
Fax: 323- 442-5721

Social Workers: Cathy Sanchez-Latin, M.S.W.
Stacey Kuhl, M.S.S.A.
Telephone: 323-442-5908
Fax: 323-442-5721

Administrators: Brad Selby (USC PPA)
Margaret Eade, RN
Telephone: 323-442-5908
Fax: 323-442-5721

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Live Donor Liver Transplantation

<p>You have demonstrated an interest in being a liver transplant donor for your family member or friend. This questionnaire is a simple means of screening individuals who are potential candidates as donors and we appreciate your honest answers to the important questions that comprise the evaluation. To be completed by each donor.</p>			
<p>WHO DO YOU WANT TO DONATE TO? _____</p>		<p>(Recipient's name)</p>	
<p>Donor's name (Your Name):</p>		<p>Donor Blood Type:</p>	<p>Attach copy of test</p>
<p>Date of birth:</p>		<p>Sex:</p>	
<p>Height:</p>		<p>Weight:</p>	
<p>Address:(street, city, state, zip)</p>			
<p>Telephone Numbers: Day:</p>		<p>Night:</p>	
<p>List known medical problems:</p>			
<p>Specifically:</p>		<p>Yes/No</p>	
<p>Diabetes (sugar problems)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>High Blood Pressure</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Heart disease</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Lung disease</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Kidney disease</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Bleeding problems</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Cancer</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Psychiatric (mental health)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Blood clots in legs</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Other</p>			
<p>Current symptoms:</p>		<p>Yes/No</p>	
<p>Breathing difficulty</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Chest pain</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Leg swelling</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Weight loss</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Headache</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Dizziness</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Fatigue (feeling tired)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Pain in arms or legs</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Skin rash</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Joint problems (knees, elbows)</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>	
<p>Do you have any problems/objections to receiving blood or blood products?</p>			
<p>List any medications prescribed by your doctor that you take currently:</p>			
<p>List any over-the-counter medications that you have taken in the past three months:</p>			
<p>Have you ever used intravenous drugs? How long?</p>			
<p>When did you stop?</p>			
<p>Snorted cocaine? How long? When did you stop?</p>			
<p>Used other recreational drugs?</p>			
<p>Do you now or have you ever smoked?</p>		<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p>Comments</p>
<p>How many years?</p>		<p>How many per day?</p>	

USC ABDOMINAL TRANSPLANT PROGRAM
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Recipient Name: _____ Donor Name: _____

Have you ever received blood transfusions?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
Do you drink alcohol?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
How many years have you been drinking?			
How many drinks per day?			
How many over the weekend?			
Date of last drink.			
Do you have other family members who drink?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
List any operations you have had:			
Abdominal operations? (list any surgeries done on your belly area, from your ribs to your hips)			
What is your relationship to the recipient?			
Why do you wish to be a donor?			
Are you under any pressure to donate?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
Do you work?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
Do you have family?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
Wife/husband?			
Other dependents			
Do you live with your family?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
If not, where?			
Are you the sole wage earner in your family?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
Who will care for your dependents if you are disabled?			
Have you discussed your decision to be a donor with your family?			
<input type="checkbox"/> Yes <input type="checkbox"/> No Comments			
Have they agreed with your decision?			
<input type="checkbox"/> Yes <input type="checkbox"/> No Comments			
Are you able to take 4-6 weeks off work without affecting your job?			
<input type="checkbox"/> Yes <input type="checkbox"/> No Comments			
Have you been disabled before?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
State condition			
Claimed disability benefits previously	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
Are you on disability now	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Comments
Do you have health insurance?			
I certify that the information provided is accurate to the best of my knowledge and give my permission to be evaluated as a potential donor.			
<input type="checkbox"/> Yes <input type="checkbox"/> No Comments			
Signature		Date	
Please keep information pages 1-4 for your records. Call 323-442-5908 if you have questions. Fax completed pages 5 & 6 w/ copy of blood type to 323-442-5721 Attention: Live Donor Coordinator.			
Or mail to:	USC Liver Transplantation Attn: Live-Donor Liver Transplantation Healthcare Consultation Center 1510 San Pablo Street, Suite 200 Los Angeles, CA 90033		