



LUNG TRANSPLANTATION IN IPF

Some Questions to Ask When Considering Transplantation:

- What are my choices besides transplantation?
- What are the risks and benefits of transplantation?
- What does the evaluation and testing process involve?
- What part of the transplantation will be covered by my insurance?
- Would my insurance cover the cost of medications?
- Who will perform my surgery?
- How will the changes in organ distribution affect my position on the list and my waiting time?
- Can I be listed in more than one region?

Useful Internet Resources for Potential Transplant Recipients

The following are some useful Internet resources for potential transplant recipients:

American Lung Association
<http://www.lungusa.org>

Transplant Recipients International Organization
<http://www.trioweb.org>

Department of Health and Human Services
Division of Transplantation
<http://www.hrsa.gov/osp/dot/dotmain.htm>

Coalition for Pulmonary Fibrosis
<http://www.coalitionforpf.org/patients/default.asp>

American Society of Transplantation
http://www.a-s-t.org/patient_education/navpatcare.htm

United Network for Organ Sharing
<http://www.unos.org>

Why Choose Transplantation?

Lung transplantation is a treatment option for IPF patients whose lung function cannot be improved by other means. It can extend and improve your quality of life.

Because of the progressive nature of the disease and the potentially long waiting period on a transplant list, you should discuss the possibility of a lung transplant with your doctor soon after being diagnosed with IPF.

Are You a Candidate for a Lung Transplant?

Most lung transplant candidates are 65 years or younger. To be considered for transplant, you must be willing to accept the risks associated with surgery and be physically capable of undergoing surgery and subsequent medical treatment and rehabilitation. To determine eligibility for a transplant, your physical and mental health must be thoroughly evaluated by a team of health care professionals.



A transplant team comprised of a transplant pulmonologist, surgeon, transplant coordinator, social worker, and pulmonary rehabilitation specialist will evaluate you. Typically, you will need to undergo several lung function tests, such as a chest scan (computed tomography), and echocardiography (ultrasound of the heart), ventilation perfusion scan and, in some cases, a cardiac catheterization. Your physician will speak with you about any additional testing. These test results, along with interviews and a medical history, will be used to determine your eligibility for transplant.

Lung transplantation may not be recommended if you have another medical condition (such as kidney, liver, or coronary artery disease; active cancer; uncontrolled infection; psychiatric illness; drug or alcohol dependence) or if you continue to smoke cigarettes. Some of these diseases will make you less suitable for lung transplantation. Patients will be thoroughly evaluated by their physician.



The Lung Transplant Procedure

A person with healthy lungs who has died or is being kept alive by machines donates a lung(s). Once the donor lung becomes available, it must be transplanted into a recipient (you) as quickly as possible. The donor is matched as closely as possible for size and blood type to the recipient.

When a lung becomes available, the recipient is contacted and prepared for surgery. General anesthesia is administered and the recipient is placed on an artificial breathing machine (eg, ventilator). The diseased lung is removed and replaced with the donor lung(s). Following surgery, the recipient may remain on a ventilator for a period of time during recovery. The recipient is usually moved out of the intensive care unit and discharged from the hospital once they are stable.

Postsurgical Care and Rehabilitation

Because your body views the transplanted lung as "foreign," your immune system will try to destroy (reject) it. Therefore, you will need to take immunosuppressant (anti-rejection) drugs following transplantation to reduce the risk of organ rejection. After the transplant, blood tests will be conducted on a regular basis to check drug levels in the blood and confirm that you are receiving the correct dose. You must take immunosuppressive drugs for life.

Prior to discharge, you will meet with the transplant team to discuss follow-up care, medications, and potential side effects and drug interactions.

Your doctor will prescribe a rehabilitation program to continue at home. The program includes physical activity (walking is generally recommended), breathing exercises, a nutrition/weight control plan, and continuation of immunosuppressant medications.

Follow-up visits will begin soon after returning home, initially occurring weekly and gradually decreasing in frequency over time. Your breathing should show significant improvement after surgery, however, the recovery period is variable.

Benefits and Risks of Transplantation

Current survival rates for lung transplant for IPF recipients are approximately 70% at one year and 40% at 5 years following transplantation. Most transplant recipients experience improvement in their breathing with little or no limitations to their daily activities.

The first year after transplantation is the most critical period for survival of the donor lung and the recipient. Complications following surgery, rejection of the new lung, and infection pose the greatest threats to survival. Complications after surgery may include major bleeding, pneumonia, and pulmonary edema (fluid in your lungs). In addition, chronic rejection of the lung is a limiting factor for 1/3 of all patients.

The risk of organ rejection is greatest within the first 3 months following surgery. Symptoms of rejection are not specific and may include shortness of breath, a change in breathing test results or chest x-rays, and reduced oxygen saturation levels. Other symptoms, such as chills, fever, and flu-like aches, occur less often and may be a sign of an infection. Because rejection can occur without obvious symptoms, regular doctor visits and breathing tests will be required.

Indefinite use of immunosuppressant drugs to prevent organ rejection reduces the body's natural ability to fight infection. Therefore, a lung transplant recipient is more vulnerable to infection, which may be more likely to become severe. Symptoms of infection, including fever, chills, cough, shortness of breath, sore throat, headache, vomiting, and diarrhea should be reported to your physician immediately.

Other problems associated with transplantation and the medications used to prevent organ rejection include hypertension, diabetes, high cholesterol, cancer, osteoporosis, cataract, and kidney disease. Your physician will carefully monitor for signs and symptoms of these conditions.