

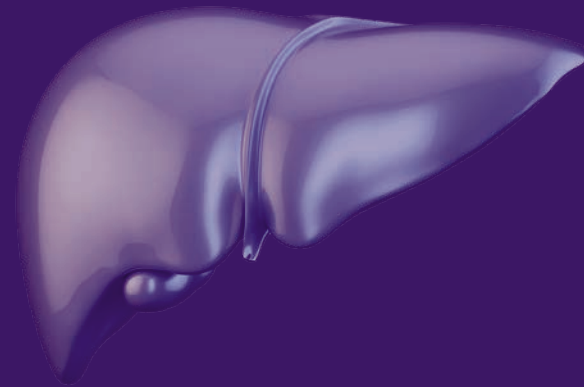
HEART-LIVER TRANSPLANT

AT UPMC

UPMC
LIFE CHANGING MEDICINE



HEART-LIVER TRANSPLANT AT UPMC



UPMC is one of the most recognized and experienced centers in the nation for organ transplantation. Our surgeons at UPMC Transplant Services have performed more than 20,000 transplants, including the first combined heart-liver transplant in 1984.

A heart-liver transplant requires extensive experience and careful collaboration between experts from both the UPMC Heart Transplant program and the UPMC Liver Transplant program. While heart-liver transplants are relatively rare, UPMC surgeons have performed more than 20 heart-liver transplants with excellent outcomes.

Our team is committed to providing life-saving care to all who will benefit, including those in need of a heart-liver transplant who have been deemed high-risk and were turned down for transplant at another center.

The Road to Heart-Liver Transplant

Heart disease and hepatic dysfunction are closely linked. Coexisting heart failure and advanced liver disease can be caused by systemic disorders and disease that affect both organs or by cardio-hepatic interactions that can lead to failure in both organs.

Advances in the surgical treatment of congenital heart disease (CHD) in infants and children have also increased the prevalence of coexisting heart failure and advanced liver disease when these patients reach adulthood. Over the last decade (2011-2020), about 30% of patients who underwent heart-liver transplant in the United States had CHD.

As this population increases, UPMC has expanded care through the Adult Congenital Heart Disease (ACHD) Center at UPMC Children's Hospital of Pittsburgh. This center provides long-term, specialty care to patients with CHD from childhood through adulthood.

The Heart-Liver Transplant Process

Experts from both the UPMC Heart Transplant Program and the UPMC Liver Transplant Program evaluate each patient referred to our center in need of a heart-liver transplant. Both teams must grant approval before listing patients for heart-liver transplantation.

When donor offers are received, both teams review the donor together according to standard donation criteria. For a complex heart-liver transplant, we maintain the donated organs using normothermic extracorporeal perfusion prior to transplant.

The organs are transplanted from a single donor and are transplanted during the same surgery, requiring a high level of expertise and collaboration. The heart is typically transplanted first followed by the liver to limit the amount of time the patient spends on cardiopulmonary bypass.

After transplant, patients are followed closely by UPMC experts throughout their recovery and lifetime.





Case Study: UPMC Surgeons Perform Rare Heart-Liver Transplant in 18-Year-Old Man

Combined heart-liver transplants are a rare phenomenon. Since 2010, only about 400 have been performed in the United States with most patients transplanted being older than 18.

In February 2022, a multidisciplinary transplant team at UPMC performed a heart-liver transplant on an 18-year-old male.

The patient initially presented with unexplained abdominal pain but was otherwise in healthy condition.

The abdominal pain was first attributed to a muscular injury, but later was thought to be related to a gall bladder issue. The patient's local doctors consequently removed his gall bladder.

Further testing revealed significant impairment of his heart function, leading his doctors to refer him to the UPMC Advanced Heart Failure Center for evaluation and treatment.

Upon arrival at UPMC, the patient was found to be in decompensated heart failure with impaired renal function. The patient's liver function was also significantly compromised and deteriorating.

Further testing determined that he had developed cirrhosis of the liver.

This discovery led doctors to add the patient to the heart-liver transplant waiting list. Doctors determined that the effects of his heart failure had caused the initial abdominal pain, kidney failure, and subsequent liver dysfunction and cirrhosis.

After 77 days, organs became available and were transplanted into the patient by the UPMC Heart Transplant Program and the UPMC Liver Transplant Program teams.

The patient was discharged from the hospital 10 days after the procedure.

At his four-month post-transplantation follow-up, the patient was doing well and was free from signs of organ dysfunction or rejection. He will continue to follow with UPMC cardiology and hepatology experts over the long term.





Why Choose UPMC?

Since 1981, our experts at UPMC Transplant Services have been providing life-saving care to patients. With a strong legacy in transplantation and innovation, UPMC has achieved many milestones in the field of multi-organ transplant.

- UPMC was the first center in the world to perform a successful heart-liver transplant.
- UPMC was the second center in the world to perform a successful heart-lung transplant.
- UPMC was the first center in the world to perform heart-liver-kidney transplant.
- UPMC surgeons have performed more than 2,350 lung and heart-lung transplants since the program began.

Our surgeons and specialists have drawn upon this breadth of experience to advance treatment techniques and patient care. Appropriate patient and donor selection, coupled with careful collaborative surgical planning, have continually yielded excellent outcomes at UPMC.



Contact Us

When you refer a patient to UPMC, our team will support them at every stage in the transplant journey. To refer your patient, or to discuss your patient's case, call **412-648-6202** or email cttransplant@upmc.edu.





CONTACT US

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