# The procedure for a living donation

Before a split-liver donation, the donor is thoroughly examined. Today such examinations are usually ambulant, meaning no hospital stay is required. Aspiration is usually not required. At the conclusion of the examinations, both the donor and recipient must appear before the transplant center's Ethics Commission, which usually has its own psychologist, independent from the transplantation team. He or she must then confirm that no pressure was placed on the donor, who, acting solely for altruistic reasons, is ready to donate. Sometimes they recommend the donor make a blood donation ahead of time, which generally is not used.

Splitting a liver is a major operation. Like every operation, it has its risks, i.e. for about five percent of donors it can lead to complications (e.g. injuries to the bile ducts, rupturing scar tissue, or growths), some of which can lead to longer-lasting problems. The death rate for split-liver donations is a minimal 0.1 to 0.2 percent.

The decision for a split-liver donation has to be very carefully considered and only undertaken in dire emergencies.

Usually the donor can already leave the hospital 10 days after the operation and is usually ready for work again after around six weeks. But donors are not, under German law, officially sick. For recipients, the results of a living donation are positive.

## **Benefits coverage**

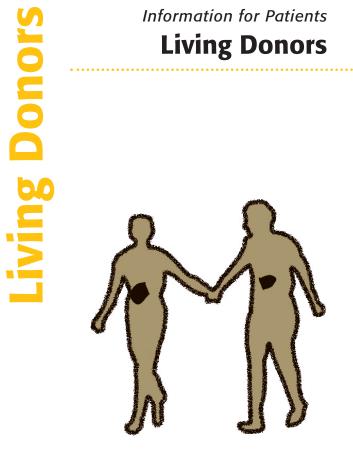
The costs covering such a donation are covered by the health insurance of the recipient. But it is recommended, to be certain, to get an assumption of costs agreement ahead of time. This is also true for wage payments.

Existing workman's compensation or life insurance agreements usually, when necessary, also pay benefits. However split-liver donors should declare their intention ahead of time.

A risk insurance for the donor is not now available.

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Other patient information brochures cover: Transplantation Aftercare, TIPS, Waiting time, MELD, Alcohol-related liver cirrhosis, Trips and LTx, Family members, etc. We're happy to help you.





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## **Living donors**

For a long time the number of organs required has far exceeded the number of organs donated. So some patients waiting for a transplant die before the planned transplantation.

One way to avoid this problem is to donate a part of the liver from a healthy adult.

A living donor makes sense for those patients with liver tumors, metabolism diseases, in the end stage of a chronic liver disease, as well as for those suffering from acute liver failure.

Children are, as a rule, given the smaller, left liver lobe, while adults receive the larger right liver lobe (about 60% of the donor's liver).

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### Legal requirements for a living donor

According to Germany's transplantation law, a strong emotional connection between the donor and the recipient is necessary before making a living donation – but the donor and recipient must not be genetically related. The donation must be voluntary. A donation for cash would be considered organ trading and a punishable offense. The donor must legally be an adult (18-plus years) and capable of agreeing to the donation.

## Medical condition for a living donor

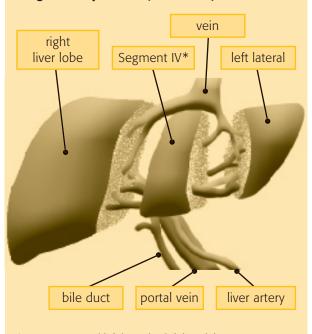
The most important pre-condition for any living donor is the good health of the donor. The donor cannot be infected with Aids, Hepatitis-B or Hepatitis-C viruses. Donors should also be mentally stable and no older than 60.

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The size of the liver is very important. Both donor and receiver should be able to survive with the part of the liver available to them following the transplantation. The characteristics of the blood vessels and bile ducts have to carefully monitored.

Advantageous would be similar, but not necessarily exactly the same, blood types between the donor and recipient.

**Diagram: a split liver (schematic)** 



\* Segment IV and left lateral = left liver lobe

Even when all these conditions are favorable, perhaps the operation cannot be carried out due to other factors, e.g. when the donor's liver has grown in such a way that it cannot be split. Up to 60% of the blood relatives willing to donate are not eligible for a split liver donation.

There are also medical pre-conditions required by the recipient; namely, their general health must allow for such a transplantation.

A living donation is possible since both the right and left liver lobes have their own separate arteries and veins, as well as a separate bile discharge. This makes it possible to preserve all the necessary in- and out vessels (or to reconnect them.)

The high regeneration ability and the large functional reserve of a liver makes it possible for the part remaining in the donor as well as the part transplanted to assume the complete liver functions immediately. Both parts grow to a full size liver within a matter of weeks, just with different blood channels and bile ducts as the original.

#### The advantages of a living donor are:

- The time of the transplant can be determined;
- The time in which the liver is not supplied with blood can be held to a minimum;
- The quality of the donated liver is normally clearly better;
- The time of the operation can be selected when optimal hospital conditions exist.