

What can be expected in end-stage liver disease (ESLD)?

The liver is the second largest organ in the body. It is located in the right upper abdomen under the rib cage. The liver has many important jobs. It filters harmful substances from the blood and converts food and fluid into the nutrients and energy the body needs. It also helps clot the blood.

Causes of liver disease include viral hepatitis, autoimmune disorders, cancer, obesity, alcohol, drugs, toxins, and genetics.

Often liver disease is not found until it is end-stage and the damage cannot be fixed. Sometimes there may be discussion of liver transplant. If liver disease is due to alcohol/drug abuse, transplant is not an option, unless there has been at least 6 months of documented abstinence. Many patients do not receive liver transplantation due to lack of donors.

Changes that can occur with end-stage liver disease:

- **Jaundice**
- **Increased risk of bleeding**
- **Buildup of fluid in the abdomen**
- **Reduced brain function**

Jaundice is a buildup of a bile pigment in the body that causes the skin and eyes to turn yellow. Jaundice is a sign that the liver can't move bile into the intestines, which normally removes it from the body.

Bleeding risk increases when the liver can no longer make proteins to help clot the blood. Changes may also occur along the person's gastrointestinal tract, such as the development of enlarged veins in the lower part of the esophagus. These enlarged veins can rupture and pose an increased risk of bleeding.

Fluid buildup in the abdomen can develop and be uncomfortable. It may cause shortness of breath by increasing pressure on the lungs. Fluid buildup may also cause nausea, loss of appetite, and abdominal or back pain. There is risk of developing an infection when this fluid is present. Fluid build up may also occur in the person's feet and legs. Sometimes a procedure can be offered to remove fluid in the abdomen.

Changes in brain function are another complication of end-stage liver disease. Toxins, such as ammonia, buildup in the blood and may cause confusion, inability to tell night from day, irritability, personality changes or memory issues. As brain function continues to decline, confusion and sleepiness increase and may progress to unresponsiveness and coma.

Other symptoms of ESLD: Itchiness, muscle cramps, trouble sleeping at night, fatigue, and depression. Symptoms of ESLD can be managed with medications.