



# Ascites: A Common Problem in People with Cirrhosis

#### **Ascites Overview**

The accumulation of fluid in the abdominal cavity is called ascites and is a common in patients with cirrhosis (scarring of the liver). The development of ascites can indicate serious liver disease and patients are often referred to a liver specialist.

#### Causes

Cirrhosis of the liver is the most common cause of ascites, but other conditions such as heart failure, kidney failure, infection or cancer can also cause ascites.

### **Symptoms**

Ascites causes abdominal distention and weight gain. Some people also develop swelling of ankles and shortness of breath.

Abdominal pain, discomfort and difficulty breathing: These may occur when too much fluid accumulates in the abdominal cavity. This may limit the ability to eat, get around, and perform activities of daily living.

Infection: This is called spontaneous bacterial peritonitis (SBP) and it usually causes abdominal pain, tenderness, fever or nausea. If not promptly diagnosed or treated, patients may develop kidney failure, severe infection in the blood stream or confusion. The diagnosis is generally made by taking a sample of the fluid from the abdominal cavity. This infection is treated with intravenous antibiotics, and, after recovery, patients often require treatment with oral antibiotics to prevent infection from recurring.

Ascites related hernias: Increased pressure in the belly can lead to the development of umbilical (around the bellybutton) and inguinal (groin) hernias that can cause abdominal discomfort.

Fluid accumulation in the chest: This is called hepatic hydrothorax and the abdominal fluid fills into the lung cavities (mostly on the right side) in addition to the abdominal cavity. This condition may result in shortness of breath.

#### **Risk Factors**

In general, the development of ascites indicates evidence of advanced liver disease. However, blood clots in the vessels in and around the liver, as well certain types of tumors in the abdomen can also cause ascites.

## Screening/Diagnosis

Depending on how much fluid is present in the abdomen, ascites may be diagnosed on physical examination, but is usually confirmed by tests such as ultrasound or CT scan of the abdomen. In the majority of patients, the doctor will recommend that a small needle be inserted through the abdominal wall (after local anesthesia) to remove fluid to be examined in the laboratory. This test is called a paracentesis. The fluid removed will be examined for signs of infection or cancer and to determine the cause for the fluid accumulation.

#### **Treatment**

The most important step to treat ascites is to strictly reduce sodium intake. Daily salt (sodium) intake should be limited to to 2,000 mg or less. As it can be difficult to determine the salt content of various foods, it is generally recommended that a patient with ascites see a nutritionist (dietician) for advice about foods to avoid.

Often, patients will benefit from water pills (diuretics) to treat ascites. Commonly used water pills are spironolactone (Aldactone) and furosemide (Lasix). These water pills can affect blood electrolyte (sodium and potassium) levels so close monitoring by blood tests may be required.

When fluid accumulation cannot be treated adequately with water pills and salt restricted diet, patients may require fluid removal (paracentesis) for relief of symptoms. Other procedures such as having a radiologist place a shunt within the abdomen (called a TIPS) to prevent significant fluid accumulation from ascites are available for patients who have difficult to treat ascites.

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#### **Patient Links**

- American Liver Foundation
- American Association for the Study of Liver Disease