



Esophageal varices

Overview

Esophageal varices are abnormal, enlarged veins in the tube that connects the throat and stomach (esophagus). This condition occurs most often in people with serious liver diseases.

Esophageal varices develop when normal blood flow to the liver is blocked by a clot or scar tissue in the liver. To go around the blockages, blood flows into smaller blood vessels that aren't designed to carry large volumes of blood. The vessels can leak blood or even rupture, causing life-threatening bleeding.

A number of drugs and medical procedures can help prevent and stop bleeding from esophageal varices.

Symptoms

Esophageal varices usually don't cause signs and symptoms unless they bleed. Signs and symptoms of bleeding esophageal varices include:

- Vomiting and seeing significant amounts of blood in your vomit
- Black, tarry or bloody stools
- Lightheadedness
- Loss of consciousness (in severe case)

Your doctor might suspect varices if you have signs of liver disease, including:

- Yellow coloration of your skin and eyes (jaundice)
- Easy bleeding or bruising
- Fluid buildup in your abdomen (ascites)

When to see a doctor

Make an appointment with your doctor if you have signs or symptoms that worry you. If you've been diagnosed with liver disease, ask your doctor about your risk of esophageal varices and how you can reduce your risk of these complications. Ask your doctor about an endoscopy procedure to check for esophageal varices.

If you've been diagnosed with esophageal varices, your doctor is likely to instruct you to watch for signs of bleeding. Bleeding esophageal varices are an emergency. Call 911 or your local emergency services right away if you have bloody vomit or bloody stools.

Causes

Esophageal varices sometimes form when blood flow to your liver is blocked, most often by scar tissue in the liver caused by liver disease. The blood flow begins to back up, increasing pressure within the large vein (portal vein) that carries blood to your liver.

This pressure (portal hypertension) forces the blood to seek other pathways through smaller veins, such as those in the lowest part of the esophagus. These thin-walled veins balloon with the added blood. Sometimes the veins can rupture and bleed.

Causes of esophageal varices include:

- **Severe liver scarring (cirrhosis).** A number of liver diseases — including hepatitis infection, alcoholic liver disease, fatty liver disease and a bile duct disorder called primary biliary cirrhosis — can result in cirrhosis.
- **Blood clot (thrombosis).** A blood clot in the portal vein or in a vein that feeds into the portal vein (splenic vein) can cause esophageal varices.
- **A parasitic infection.** Schistosomiasis is a parasitic infection found in parts of Africa, South America, the Caribbean, the Middle East and Southeast Asia. The parasite can damage the liver, as well as the lungs, intestine and bladder

Risk factors

Although many people with advanced liver disease develop esophageal varices, most won't have bleeding. Varices are more likely to bleed if you have:

- **High portal vein pressure.** The risk of bleeding increases with the amount of pressure in the portal vein (portal hypertension).
- **Large varices.** The larger the varices, the more likely they are to bleed.
- **Red marks on the varices.** When viewed through an endoscope passed down your throat, some varices show long, red streaks or red spots. These marks indicate a high risk of bleeding.
- **Severe cirrhosis or liver failure.** Most often, the more severe your liver disease, the more likely varices are to bleed.
- **Continued alcohol use.** Your risk of variceal bleeding is far greater if you continue to drink than if you stop, especially if your disease is alcohol related.

Complications

The most serious complication of esophageal varices is bleeding. Once you have had a bleeding episode, your risk of another bleeding episode greatly increases. If you lose enough blood, you can go into shock, which can lead to death.

Prevention

Currently, no treatment can prevent the development of esophageal varices in people with cirrhosis. While beta blocker drugs are effective in preventing bleeding in many people who have esophageal varices, they do not prevent esophageal varices from forming.

If you've been diagnosed with liver disease, ask your doctor about strategies to avoid liver disease complications. To keep your liver healthy:

- **Don't drink alcohol.** People with liver disease are often advised to stop drinking alcohol, since the liver processes alcohol. Drinking alcohol may stress an already vulnerable liver.
- **Eat a healthy diet.** Choose a plant-based diet that's full of fruits and vegetables. Select whole grains and lean sources of protein. Reduce the amount of fatty and fried foods you eat.
- **Maintain a healthy weight.** An excess amount of body fat can damage your liver. Obesity is associated with a greater risk of complications of cirrhosis. Lose weight if you are obese or overweight.
- **Use chemicals sparingly and carefully.** Follow the directions on household chemicals, such as cleaning supplies and insect sprays. If you work around chemicals, follow all safety precautions. Your liver removes toxins from your body, so give it a break by limiting the amount of toxins it must process.
- **Reduce your risk of hepatitis.** Sharing needles and having unprotected sex can increase your risk of hepatitis B and C. Protect yourself by abstaining from sex or using a condom if you choose to have sex. Ask your doctor whether you should be vaccinated for hepatitis B and hepatitis A.

By Mayo Clinic Staff

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