
Understanding Endoleaks

An endoleak is a complication that can occur after having an endovascular aneurysm repair (EVAR). EVAR is done to treat an abdominal aortic aneurysm. During EVAR, the surgeon places a metal mesh tube called a stent to support the weak part of the aorta. The goal is to keep blood from flowing back into the aneurysm sac. But if there is a poor seal on either end of the graft used to bypass the aneurysm, blood can leak back into the sac.

Symptoms

An endoleak usually causes no symptoms. It's often found in a regular follow-up visit. If symptoms do develop, they may seem similar to an aneurysm before repair. They can include back or side pain.

Causes

There are several types of endoleaks. The causes vary slightly.

- Type 1 is caused by a poor seal at either or both ends of the graft. This results in pressure in the sac. It can lead to a break (rupture).
- Type 2 is caused by increased pressure in the side branches of the aorta.
- Type 3 is caused by an endograft that's damaged. Or by an endograft that isn't lined up correctly. This also increases pressure and can lead to a rupture.
- Type 4 is caused when blood leaks through the graft material.
- Type 5 leaks are leaks with no known cause.

Diagnosis

Endoleaks are often found during a follow-up CT scan or ultrasound after EVAR.

Treatment

An endoleak will sometimes seal on its own. In other cases, the surgeon will try to reinforce the seal on the graft with stents. Or they may place cuffs at the graft ends. Or the surgeon may move the graft to a healthier portion of the artery. In type 1 endoleaks, the surgeon may inject clotting material to seal off the leak (translumbar or transarterial embolization). You may need open surgery to repair the aneurysm if these methods don't work.