



What is Acute Limb Ischemia?

Acute limb ischemia (ALI) happens when blood flow to an arm or leg suddenly stops. This can be caused by a blood clot or a buildup of fat that blocks the blood vessels. When this happens, the arm or leg doesn't get the oxygen it needs. Without quick treatment, ALI can cause tissue damage, organ problems, or even loss of the arm or leg. It is a medical emergency and needs care right away.

Symptoms

ALI symptoms start suddenly and are often very serious. They are sometimes called the “Six Ps”:



Pain: sudden, severe pain in the arm or leg, even at rest



Pallor: the arm or leg looks pale



Pulselessness: the pulse is weak or missing in the arm or leg



Paresthesia: tingling, numbness, or “pins and needles”



Paralysis: trouble moving the arm or leg



Poikilothermia: the arm or leg feels much colder than the rest of the body

Causes and Risks

ALI can happen for several reasons:

- **Embolism:** A blood clot from another part of the body travels and blocks a blood vessel in the arm or leg
- **Thrombosis:** A blood clot forms inside a blood vessel that is already narrowed by fatty buildup (plaque)
- **Injury:** Damage to a blood vessel from an accident or trauma

ALI happens more often to people who:

- Live with heart problems or irregular heartbeats
- Develop fatty buildup in blood vessels (when fat and cholesterol stick to the inside walls of blood vessels, so blood has a harder time getting through)
- Experience blood clots
- Smoke



Recognizing ALI

ALI is a serious condition, and you need to see a doctor to find out if you have it. First, a doctor or vascular surgeon will check for a pulse in the affected arm or leg. Tests may be done in a hospital or an imaging lab with a doctor's referral and may include:

- An ultrasound to look at blood flow and find blockages
- An angiogram, where a special dye is injected into the blood vessels so blockages can be seen on an X-ray
- A CT scan to see where blood vessels are blocked

Role of a Vascular Surgeon



If you notice any symptoms of ALI, get medical help right away. ALI is a medical emergency. Talk with your doctor about any risk factors you may have and ask for a referral to a vascular surgeon if you are worried about ALI.

Vascular surgeons are the only specialists trained to diagnose and treat the full spectrum of vascular diseases. Vascular surgeons are trained to do emergency procedures that help blood flow again and save the arm or leg.

Treatment

The goal of treatment is to get blood flowing again as fast as possible. Treatments may include:

- ✓ **Medication** to break up clots or stop new ones from forming
- ✓ **Catheter-directed thrombolysis**, where doctors use a thin tube to deliver clot-dissolving medicine directly to the clot
- ✓ **Catheter-based thrombectomy**, where a small tube is used to remove the blood clot from the artery
- ✓ **Surgery** to remove the clot or create a new path for blood to flow around the blockage
- ✓ **Opening the blood vessel via an angioplasty (or stenting)** where doctors use a small balloon or mesh tube to widen narrow blood vessels and keep them open

Getting care right away is very important to prevent lasting damage. Anyone who thinks they may have ALI should go to the emergency room immediately.