

# Antiphospholipid Syndrome (APS) and the Risk of Blood Clots

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**Antiphospholipid syndrome (APS)** is an autoimmune disease. **Autoimmune diseases** happen when the body's immune system, which normally works to fight off infections, becomes confused and attacks a person's own healthy body parts. APS affects around 1 in 2000 Americans. For patients with APS, watching out for and preventing blood clots is very important. Many patients with APS have already had at least one blood clot. There are different types and locations of blood clots in the body. It is important to make sure you know how to reduce your risk of blood clots and get help immediately if you show signs of a blood clot.

## **Types and symptoms of blood clots**

A **blood clot** is a gel-like clump of blood that builds up in a blood vessel and blocks the flow of blood through the vessel. Blood clots can happen in any artery or vein in the body. **Arteries** move blood from the heart to the organs, and **veins** move blood from the organs back to the heart where the blood can get fresh oxygen from the lungs.

## **Deep vein thrombosis (DVT)**

A **DVT, or deep vein thrombosis**, is a blood clot in a large vein, usually in the legs or sometimes in the arms. Signs of a DVT include:

- A new feeling of pain, warmth, and swelling in the legs or arms (usually this happens in only one leg or one arm)
- Pain in your calf (the area on the back of your leg below the knee) when you move your foot up and down
- Color changes in your skin

DVTs are diagnosed with an ultrasound machine (available in any Emergency Room).

### **Pulmonary embolism (PE)**

A **PE, or pulmonary embolism**, is a blood clot in the blood vessels in the lungs. Sometimes a DVT breaks off of the vein where it originally formed and becomes a PE. This is one of the reasons why diagnosing a DVT early is really important.

Signs of a PE include:

- New chest pain
- Shortness of breath
- Increased breathing rate
- Increased heart rate
- Coughing up fluid with blood in it

A PE is usually diagnosed with a CT scan. This is a medical emergency and it can be life-threatening.

### **Heart attack**

A **heart attack** is caused by a blood clot in the arteries that deliver blood to the heart's muscles. Symptoms include:

- Chest pain that starts suddenly and lasts more than a few minutes
- Shortness of breath
- Pain that travels into the jaw, neck, shoulder, arm, or stomach
- Nausea or vomiting
- Lightheadedness or fainting
- Intense sweating

Heart attacks are diagnosed with blood tests, an EKG, and other ways of looking at blood flow in the vessels of the heart. A heart attack is another medical emergency that can lead to death if not identified and treated immediately.

## **Stroke**

A **stroke** can be caused by a blood clot in the arteries of the brain. Depending on where it is in the brain, it can cause some different symptoms. Symptoms usually start suddenly and could include:

- Numbness
- Weakness of the face or limbs
- Slurred speech, or having trouble speaking
- Loss of vision
- Confusion
- Having trouble walking
- A sudden and severe headache

A stroke is another medical emergency that can lead to death if not identified and treated immediately.

## **Other types of blood clots**

There are also other blood clots that may not have the symptoms listed above because they are smaller or affect unusual parts of the body. In such cases, you will need to trust your instincts and get care when something does not seem right, or when you feel much worse than usual. You should get care if symptoms start suddenly.

## **When should I get help?**

**If you think you could be having one of these serious blood clots, call 911 (Emergency Medical Services) or get help at the closest Emergency Room immediately.** Do not wait when you need to get tested for one of these types of blood clots.

## **How can I reduce my risk of blood clots?**

Having a diagnosis of APS, or having had a blood clot before, increases your risk of new blood clots. Even if you don't have an APS diagnosis, having high levels of antiphospholipid antibodies in your blood may still increase your risk of blood clots. Ask your doctor about this if you are not sure. Other

autoimmune diseases, such as lupus, can also increase your risk of blood clots, especially if you also have antiphospholipid antibodies.

Certain treatments, such as blood thinners, can reduce your risk of blood clots, but you and your doctor must talk about the risks and benefits of these medications.

You may not be able to avoid some of the risk factors, but there is still a lot that you can do to protect yourself from blood clots.

**Things to do:**

- Take your medications (such as blood thinners) regularly as instructed by your doctor.
- Drink water and stay well-hydrated. Dehydration increases the risk of blood clots.
- Stay physically active with regular exercise. Even simple exercise like going for a walk is great for **cardiovascular** (heart and blood vessel) health.
- Work with your doctor to treat other risk factors for blood clots, including high blood pressure, diabetes, high cholesterol, and obesity.
- Maintain a healthy weight.
- If you have surgery planned where you won't be able to move normally for a long period of time (such as a joint replacement), work with your doctor before the surgery to prevent blood clots.
- If you are traveling for a long time (4-5 hours or more in a plane, train, or car), think about wearing compression stockings. These are tight-fitting socks that can help improve the blood flow in your legs. Also, take breaks to walk every hour, continue to move your feet and toes while sitting, and drink more water.

### Things to avoid:

- Do not smoke. Smoking increases the risk of blood clots. Smoking also makes it harder to treat autoimmune diseases. Ask about **smoking cessation** programs (programs that help you quit smoking) if you need help quitting.
- Don't take birth control pills that have estrogen (also called **combined oral contraceptive pills**). There are other forms of birth control that have a lower risk for blood clots, so talk about your options with your doctor.
- In some cases, hormone replacement therapy might increase the risk of blood clots. If you are receiving hormone replacement therapy, check with your doctor about your blood clot risk.
- Do not drink too much alcohol. This can make you dehydrated, increasing your risk for blood clots.
- Avoid sitting for a long time. If you have to sit for a long time, take breaks and move your feet and toes.

There are many steps you can take to reduce your risk of blood clots, and it is important to talk about this regularly with your doctor. Again, if you are worried that you might have a blood clot, get help immediately!

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