

## What Is It?

Antiphospholipid antibody syndrome (APS) causes blood clots in the veins or arteries, miscarriages and other problems. The condition can affect any organ, including the lungs, brain, liver, kidneys, eyes, heart and skin. Women with the syndrome can have repeated miscarriages or late-term death of the fetus.

APS probably involves the immune system, although no one knows its exact cause. People with APS have antibodies that interact with proteins in the blood and cause the blood to clot more than normal. Antibodies are molecules produced by the immune system that normally fight infection. Having antiphospholipid antibodies does not necessarily mean that someone will develop symptoms. Up to 8% of normal people without any evidence of APS have the antibodies.

There are two types of APS: primary and secondary. People with primary APS do not have any associated condition. The secondary form is associated with another immune disorder, such as [lupus](#) (systemic lupus erythematosus), or with a viral infection. Some doctors believe a medication causes secondary APS. The most common suspect is chlorpromazine (Thorazine). A brief form of secondary APS occurs commonly in children after a viral infection.

## Symptoms

The symptoms of APS can include any of the following:

- **Nervous system** — APS can cause [stroke](#); involuntary jerking movements of the arms or legs (chorea); dementia; migraines and other problems of the nervous system. Stroke symptoms include slurred speech or difficulty understanding or forming words, change in vision or weakness on one side of the body. In a form of APS called Sneddon's syndrome, people have repeated strokes and a mottling of the skin that is lacy purple and white, called livedo reticularis. Some people with APS develop a syndrome similar to [multiple sclerosis](#). They can have numbness, double vision and difficulty walking or urinating.
  
- **Heart and blood vessels** — APS can lead to [heart attacks](#), heart valve problems that can mimic bacterial endocarditis, and clots in the upper chambers of the heart. Up to 20% of younger people who have a heart attack have antiphospholipid antibodies. Clots in the veins can cause inflammation of the veins (thrombophlebitis) of the legs with pain in the thigh or calf, swelling of the leg, and sometimes a visible, red, thickened blood vessel.
  
- **Blood cells** — Up to one in four people with a condition called idiopathic thrombocytopenic purpura have antiphospholipid antibodies. Over time, many of these people develop APS. Idiopathic thrombocytopenic purpura is characterized by a low number of platelets, which help the blood to clot.

People with idiopathic thrombocytopenic purpura and APS may form blood clots or develop bleeding problems, including life-threatening severe bleeding. Also, red blood cells can break down abnormally, causing fatigue, dizziness and pale skin, but this is more common in people with lupus.

- **Lung** — Blood clots in the lung can cause chest pain, shortness of breath and rapid breathing. Repeated clots can cause elevated pressure in the blood vessels around the lungs (pulmonary hypertension), which may cause the person to be constantly short of breath.
  
- **Gastrointestinal** — APS can affect the blood supply to the intestines, causing abdominal pain, fever and blood in the stool. APS can cause a condition called Budd-Chiari syndrome, in which a blood clot prevents blood from flowing out of the liver, and the person may experience nausea, vomiting, jaundice (yellow skin) dark urine, pale stool and swelling of the abdomen.
  
- **Kidneys** — Blood clots that affect the kidneys can cause kidney damage and blood in the urine.
  
- **Skin** — APS can cause purple and white mottling of the skin, and repeated sores (ulcers) and bumps (nodules) of the skin. It can cause tissue in the fingertips to die (gangrene).
  
- **Eyes** — Veins or arteries in the retina can be affected, causing blurring or loss of vision.
  
- **Pregnancy** — APS can cause problems for the fetus, such as miscarriage, a partial or complete separation of the placenta from the uterus before the baby is born (placental abruption) and a small placenta. It can cause problems for the pregnant woman, such as stroke or blood clots in the lungs. APS may be associated with a syndrome of pregnancy known as HELLP: **h**emolysis (breakdown of red blood cells), **e**levated **l**iver tests and **l**ow **p**latelets.