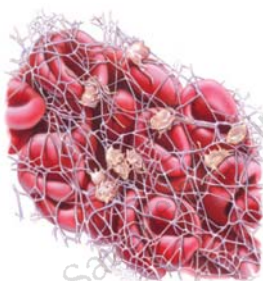


# MANAGING YOUR ANTIPHOSPHOLIPID ANTIBODY SYNDROME



APS is a disorder of the immune system that causes too much blood clotting. It is often related to problems occurring during pregnancy and the presence of antiphospholipid antibodies in the blood.



Normally, blood clots to stop bleeding when you get injured (e.g., a cut). When blood clots but no injury has occurred, the clot may block blood flow through an artery or vein and cause serious problems.

Antiphospholipid antibodies interact with the clotting system so that people can get deep vein thrombosis and arterial thrombosis, which can lead to heart attacks and strokes.



Deep vein thrombosis is formation of a clot (thrombus) in a vein, usually in the leg.



Arterial thrombosis is formation of a clot in an artery.



Clots in deep veins in the legs cause pain, swelling, redness, and warmth.

## What Is Antiphospholipid Antibody Syndrome?

In antiphospholipid antibody syndrome (abbreviated APS), people have too much blood clotting and have antiphospholipid antibodies in the blood. Antibodies are substances produced by the immune system (disease fighting system) to attack substances foreign to the body. Autoantibodies (antibodies against one's body) occur when there is a problem with the immune system. Problems with pregnancy, such as miscarriage or premature birth may occur.

## What Causes APS?

The cause is unknown. It can't be caught or passed from generation to generation. Antiphospholipid antibodies are thought to interact with the body's clotting system, so people are prone to getting deep vein thrombosis (formation of a blood clot, or thrombus, usually in leg veins) and arterial thrombosis (clots in arteries). These clots can lead to heart attacks and strokes.

The antiphospholipid antibodies are called lupus anticoagulant and anticardiolipin antibodies. They are found in people with systemic lupus erythematosus (an autoimmune disease, meaning the body's immune system attacks itself). Other risk factors for development of APS include rheumatoid arthritis, Behçet's syndrome, and Sjögren's syndrome. Medicine including hydralazine (for blood pressure), quinine (for leg cramps), and certain antibiotics can sometimes cause APS.

## What Are the Symptoms of APS?

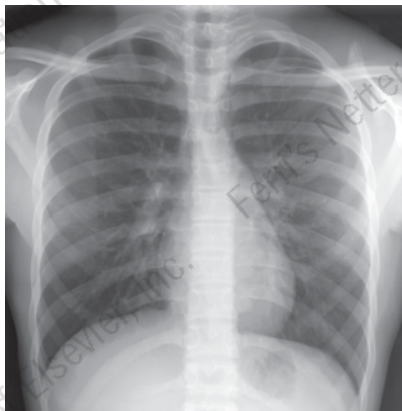
Clots in both veins and arteries can occur. Most often, venous thrombosis occurs in deep veins of legs. The clots cause leg swelling, pain, redness, and warmth. The most common site for thrombosis in arteries is cerebral (brain) blood vessels. Stroke, with slurred speech, paralysis, numbness, weakness, loss of vision, and swallowing problems, can result.

Other parts of the body involved include the heart, lungs, gastrointestinal tract, kidneys, and skin. Pregnant women can suffer spontaneous abortions, and the blood system can be affected, so anemia (low red blood cell count) or thrombocytopenia (low platelet count) results.

## MANAGING YOUR ANTIPHOSPHOLIPID ANTIBODY SYNDROME



Blood tests and x-rays are used for diagnosis.



Blood thinners such as warfarin are usually prescribed as treatment in nonpregnant patients. Another blood thinner called heparin is used during pregnancy.

Call your doctor if you have signs of excessive blood thinning.



### FROM THE DESK OF

#### NOTES

### How Is APS Diagnosed?

The doctor may suspect APS because of blood clots, and will order blood tests and x-rays to aid diagnosis and rule out complications.

At least one clinical feature and one laboratory feature are needed for diagnosis. Clinical features are clots or complications in pregnancy (death of a fetus, premature birth, or spontaneous abortions). Laboratory features include presence of anticardiolipin antibodies or lupus anticoagulant.

### How Is APS Treated?

Blood thinners are used to prevent clots from forming. Common drugs are heparin and warfarin. If APS is caused by another disease, the doctor will treat that condition.

Regular blood tests are needed to monitor the level of blood thinner. Physical activity such as playing contact sports should be avoided.

### DOs and DON'Ts in Managing APS:

- ✓ **DO** understand that although aspirin is a blood thinner, aspirin alone is not a useful APS treatment.
- ✓ **DO** understand that you can have antiphospholipid antibodies without having blood clotting, and blood thinners may not be needed.
- ✓ **DO** call your doctor if you think that you're pregnant or if you have a history of APS and you're pregnant.
- ✓ **DO** call your doctor if you have symptoms of APS.
- ✓ **DO** call your doctor if you are using blood thinners and have signs of too much blood thinning, such as easy bruising and bleeding.
- ⊘ **DON'T** miss your warfarin dose. Its blood level must be kept at the recommended range to reduce clotting risk.
- ⊘ **DON'T** use oral contraceptives if you already have antiphospholipid antibodies.

### FOR MORE INFORMATION

#### Contact the following sources:

- National Heart, Lung, and Blood Institute  
Tel: (800) 575-9355  
**Website:** <http://www.nhlbi.nih.gov>
- National Stroke Association  
Tel: (800) 787-6537  
**Website:** <http://www.stroke.org>