

**What happens if I stop warfarin and do not take low molecular weight heparin?**

If you do not continue anticoagulation up to the point of surgery, you risk having spontaneous clots recur.

**What about minor procedures?**

For minor dental procedures or dermatologic procedures or other interventions that are not likely to cause a lot of bleeding, it is often safer to leave the anticoagulation alone than to discontinue it.

**Hospital for Special Surgery**

Barbara Volcker Center for  
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SURGERY**



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**SURGERY AND  
ANTIPHOSPHOLIPID  
SYNDROME**

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# SURGERY AND ANTIPHOSPHOLIPID SYNDROME

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## What is antiphospholipid antibody?

Antiphospholipid antibody (aPL) is an abnormal blood protein (antibody) that causes blood clots and/or pregnancy losses. It is measured in several different ways, and is named for the way it is measured. In one test, it is called *anticardiolipin* antibody; in another, it is called *lupus anticoagulant*. It can also be called *antibody to beta-2-glycoprotein I*; sometimes, because of a technical aspect of the way the test is done, the antibody causes a *false positive* test for syphilis. (People with a false positive test do not have syphilis, or anything like it.) The term *antiphospholipid* refers to all of these tests. Patients have antiphospholipid syndrome (APS) when they have both blood clots and aPL (or pregnancy loss and aPL).

About 1 of every 3 people with lupus has aPL, but only about half of people with APS have lupus. People with APS, but without lupus, only have the primary antiphospholipid syndrome (PAPS). Those with both lupus and APS have secondary APS. The APS symptoms are the same for both, but people with secondary APS have additional symptoms due to lupus.

## Why am I taking anticoagulant medication?

If you have had a blood clot, you will be treated with an anticoagulant medication, such as warfarin (Coumadin) or heparin (including low molecular weight heparin). If you are pregnant, you will be treated with one of the heparin preparations, since warfarin cannot be used in pregnancy.

If you have to undergo a surgical operation or procedure (such as a colonoscopy), **YOU MUST CONTINUE ANTICOAGULATION** except during the surgery or procedure itself.

You should discuss this with the physician prescribing your anticoagulation and with the person performing the procedure, since individual needs differ. Always discuss your plans with your physician.

## Common recommendations for anticoagulation for elective procedures:

- *7 days before the procedure*, discontinue warfarin.
- *5 days before the procedure*, start low molecular weight heparin and a dose of 1 mg per kilogram (70 mg of Lovenox for a 145 pound person) twice daily, if kidney function is normal. Use a different dose if kidney function is abnormal.
- *24 hours before the procedure*, stop low molecular weight heparin.

- *24 hours after the procedure*, or when the surgeon gives the OK, restart low molecular weight heparin in the same dose, and start taking warfarin again. (It takes several days for warfarin to have its effect.)
- *On the 4th day after the procedure*, when the warfarin effect has occurred, discontinue the low molecular weight heparin (and continue the warfarin). If there are any questions about this, remember to consult with your surgeon and physician well in advance of the procedure.

## What if I need emergency surgery?

If you need emergency surgery, the effect of warfarin or heparin can be reversed very quickly by physicians, but the risk of inducing clotting is high. You should start taking anticoagulation as soon as possible after the surgery:

- *24 hours after the procedure*, or when the surgeon gives the OK, restart low molecular weight heparin (for instance, Lovenox at 1 mg/kg twice daily), and start taking warfarin again. (It takes several days for warfarin to have its effect.)
- *On the 4th day after the procedure*, when the warfarin effect has occurred, discontinue the low molecular weight heparin (and continue the warfarin).