Effort Thrombosis

What is effort thrombosis?

Effort thrombosis is a blood clot (thrombus) in the deep vein of the arm. It most often occurs in the subclavian vein. This is the vein between the first rib and the collarbone.

What are the symptoms?

If you have effort thrombosis, you may have these symptoms in your arm:

- Sudden swelling
- A feeling of heaviness
- Pain
- Skin changes color

Who gets effort thrombosis?

Most people who get effort thrombosis are young, athletic, or do the same arm motions over and over, such as painters and swimmers. The repeating motion seems to irritate the blood vessel, and this causes a clot to form.

How is it diagnosed?

Most clots are hard to find with ultrasound. To diagnose effort thrombosis, you may need to have a venogram in the Radiology Department. A venogram is an X-ray test that takes pictures of blood flow through the veins.

How is it treated?

If your doctors find a clot, they may try to remove the clot with a clot-dissolving medicine such as tissue plasminogen activator (TPA).
If your clot is in your subclavian vein between your collarbone and your first rib, there are 3 options for treatment. They are:

- Stop doing the activity that causes vein compression and irritation.
- Do nothing at all. This may lead to more clots. But, new veins may grow that will drain blood from your arm. This helps the swelling and pain improve over time. Swelling may still occur when you use your arm.

If you choose not to have your thrombosis treated, there is a very low risk that the clot will break off and travel to another part of your body. But, if this does happen, it can be very dangerous.

- Take *anticoagulation* medicine. This keeps the blood from clotting at the site of thrombosis. You will need to be on this medicine for a long time.
- Remove the first rib to protect the subclavian vein from becoming compressed and irritated. This is called *rib resection surgery*.

**Rib Resection Surgery**

If you have rib resection surgery:

- You may need to have a venogram to check if your subclavian vein is open enough for a rib resection to help. If you have already had this test, you may need to have it again.
- During the venogram, your health care provider may also want to see if the vein compresses when you raise your arm above your head. If it does, your surgeon will recommend the rib resection.
- The incision will be under your armpit or on your chest below your collarbone.

**What to Expect After Surgery**

- About half of all patients need a small chest tube after surgery to help their lung stay open. If you need a chest tube, you will need to stay 1 or 2 extra nights in the hospital.
- The most common side effect of the surgery is numbness under the arm. For most patients, most of this numbness is gone or no longer bothers them 3 to 6 months after surgery.
- Your incision will be covered with small white tapes called Steri-Strips.
- You can shower 24 hours after surgery.
- Avoid lifting anything that weighs more than 5 pounds for 4 weeks.
- You will need to do a physical therapy exercise to help you recover. To do this exercise, you will stand arm’s length from a wall and slowly walk your hand up the wall until you can reach your arm above your head.