

Artery Closure Devices: Care and Questions

(examples of these devices: Perclose and Angioseal)

Sometimes after a procedure Dr. Song will use a device to close off the hole in the leg artery used to work inside the body. If the device works, there is no bleeding from the leg and the patient can move his leg without worrying about rubbing the scab off the hole in the leg artery causing lots of bleeding.

This device is commonly used if:

1. The patient is on blood thinners (e.g. Plavix, coumadin, heparin, and sometimes aspirin) because a strong clot will not form over the artery hole
2. The patient unable to stay still to let the blood clot strengthen
3. The hole made in the leg artery is too large

The reasons that the device is not used for all patients is because there are risks to this device.

1. The device that stays around the leg artery gets infected
2. The device causes narrowing of the artery either by pinching off part of the artery or scar tissue forms that narrows the artery. Patient's feel a new cramping feeling in the treated leg walking long distances and decreased pulse in the foot.
3. The devices pinches a nerve next to the artery causing a stinging sensation down the leg.

Post-treatment:

The most dangerous thing that can occur after the use of this device is infection. If the device gets infected, it will infect the artery and may require surgery. Surgery includes opening the wound, patching the artery but if bad enough may require placement of a artificial graft or even amputation! I have used this device for many years and have had only two infections and none required an artificial graft or amputation. I do not want any of my patients to have one.

It is therefore very important not to get an infection.

How to minimize infection:

A lot of these risks have been minimized during your procedure. (The surgical site was scrubbed with disinfectant, sterile drapes and equipment used. Before deployment of the device several additional steps are done and special dressings are placed on the wound to prevent bacteria from entering the wound and getting to the device).

However there are steps that have to be done by the patient to help reduce that risk also.

1. Do not get the wound dirty until the scab has fallen off and new skin has formed. (no swimming, Jacuzzi, baths or mud wrestling etc). This usually takes a week.
2. You may shower 24 hours after the procedure, but keep the site dry. One can do this by getting a drawstring “hefty bag” and cutting the bottom off so

one can wear this as a skirt while showering. This will prevent most of the water from running down your body and toward the wound. The leg with the bandage can be carefully washed with a sponge. Please do this for 4-5 days.

3. Leave the white adhesive strips on the wound until they curl and fall off the skin. (We use a special plastic coating to cover the cut, and then cover the plastic with the paper strips. If you peel off the strip you may peel off the plastic covering the wound also.)
4. You may use antibacterial ointment, like Neosporin and a Bandaid to cover the area. If the Bandaid becomes wet, please replace or remove it.
5. If the wound opens up, go back to the hospital, the skin may have to be closed again or antibiotics given
6. Take it easy for a few days after the procedure so the wound has time to heal
7. Inspect the site daily
8. Symptoms of wound infection: The puncture site may be tender after the procedure, this is normal. Infection becomes a concern if the pain lessens and then it gets worse especially after a few days. You may notice a pulsing lump under the cut, the skin may become red or fevers develop. **It is very important if this occurs to go to the emergency room** to get this checked. Early treatment will help minimize any problems to your leg.

Activities:

--You may continue normal activity when instructed by your physician.

--Do not lift anything over 10 pounds for one week.

What to expect normally:

--Soreness or tenderness that may last one week. It should not get worse!

--Possible bruising that lasts two weeks.

--A small lump (dime to quarter sized) under the skin that may last up to six weeks. It will be scar tissue. This should not be very tender and there should be no redness, unlike an infection.

Call the doctor immediately for any of the following, if no response go to emergency room or call 911:

--Severe bleeding. Lay down immediately. Apply firm pressure directly on the incision for 10 minutes.

--Increased swelling of the groin or leg

--Signs of infection: redness, warm in area to touch, drainage (other than a little blood on the bandage), the incision does not seem to heal, fevers or chills.