Surgical Bypass for Aortoiliac Occlusive Disease

BY DR. RAGHUVEER VALLABHANENI

A surgical bypass reroutes blood flow around a diseased artery to increase blood flow to your legs. Surgical bypass is not a cure for aortoiliac occlusive disease. It is a treatment given to resolve the symptoms when medical management or minimally invasive therapies, such as balloon angioplasty and stenting, have not worked or are not suitable for you.

Why It's Done

An aortoiliac bypass may be needed if you have severe blockages in your aorta or iliac arteries in your pelvis that cause severe discomfort in your legs when you walk. The blockages may be so severe that your feet hurt even when lying down (rest pain), or wounds develop on your legs because of lack of blood flow.

Description

AN AORTOFEMORAL BYPASS is the placement of a graft connecting your aorta and one of both femoral arteries in your pelvis to bypass a diseased vessel and increase blood flow to your legs. The aorta is accessed through an
incision down the middle of your abdomen. Using tiny stitches, the graft is sewn into place above the blockage on the aorta and below the blockage on the femoral artery/ies. The tissue is then closed in layers over the graft in the abdomen and the groins.

Pain may last for several days to a few weeks after the procedure, mostly from the abdominal incision. Your surgical team will provide you with adequate amounts of pain medication to keep you comfortable.

AN AXILLOFEMORAL OR AXILLOBIFEMORAL BYPASS is a safer approach in some cases. Instead of using the aorta as the source of blood flow, the axillary artery is used, the artery that routes blood from your neck to your arm. An incision is made below the collarbone and in one or both groins. A graft is sewn in with tiny stitches at the origin and destination points for the bypass.

Pain may last for several days after the procedure. Your surgical team will provide you with adequate amounts of pain medication to keep you comfortable.

Time in surgery varies greatly, depending on weight, scar tissue and extent of disease.

Risks

The possible complications of these operations include death, heart attack, stroke, wound problems, graft infections, bleeding, graft blockage, need for another operation and limb loss.

Following aortobifemoral bypass:

- You should not soak in a bathtub until all wounds are completely healed—at least 2 weeks from the date of surgery.
- You should not lift anything heavier than 20 lbs. for several weeks, until the incisions are well healed.
- Typically staples are left in the abdomen that can be removed within 1-2 weeks by your physician.

Following an axillobifemoral bypass:

- If at all possible, do not sleep on the side of the graft while the graft is open.
- The arm on the side of the graft should not be lifted overhead or used to pull up. This may cause a tearing of the graft off the vessel.

How to Prepare

- If you smoke, stop to help the bypass last longer and aid wound healing.
- Most patients take aspirin as well as a cholesterol medication prior to surgery. Ask your vascular surgeon if you should adjust any other medications, such as blood thinners.
- You will probably be required to fast (no food or drink) after midnight the night before surgery.
What Can I Expect After Treatment?

These operations are performed to improve blood flow to your legs. If successful, you should be able to walk further or have less pain in your legs than before the surgery. Leg pain from other conditions, such as back problems or nerve pain, will not be changed.

You will probably feel incision pain for several days to a few weeks and be treated with pain medications.

Resources

Aortoiliac Occlusive Disease
Atherosclerosis