

## **INDICATIONS AND POSSIBLE COMPLICATIONS OF INFRA-INGUINAL BYPASS GRAFTS (FEMORO-POPLITEAL OR FEMORO-DISTAL OR POPLITEAL-DISTAL BYPASSES) WITH OR WITHOUT VEINS (PROSTHETIC GRAFTS):**

If the bypass is performed for claudication, life style limiting claudication, rest pain, tissue loss (ulcers) or gangrene, because of an occluded or thrombosed thigh artery (SFA- superficial femoral artery) we perform a bypass graft to improve the blood flow to the leg with the patient's own veins, from the lower extremity or arms, and in some instances, we use prosthetic grafts made out of polyester (Dacron), polytetrafluoroethylene (PTFE) or cadaveric veins (cryoveins), depending on the anatomy of the patients vessels and comorbidities.

We use prosthetic grafts when the patient has the thigh artery (superficial femoral artery-SFA) occlusion and it reconstitute above the joint line or knee level. The patient should be a NON smoker, have at least two vessel run-off (outflow vessels) below the knee and be able to be anticoagulated with Coumadin. If the patient might need his vein for heart bypasses in the near future, this might be a relative indication to use prosthetic grafts given if the mentioned requirements are present.

If the bypass is done for Limb Salvage, it means that the bypass is done for rest pain, tissue loss (non-healing ulcers) or gangrene. The ulcers might predispose the patient for a higher rate of infection and complications of the wounds or higher thrombosis rate of the bypass graft. The more distal the bypass (longer size conduit), the higher rate of thrombosis/failure of the graft. Especially in diabetics, smokers, renal failure patients, immune-suppressed patients or patients with open ulcers.

### **WHO NEEDS INFRAINGUINAL BYPASSES:**

Patients with peripheral arterial disease (PAD) and claudication that would like to be able to walk more.

Life style limiting claudication, unable to walk because of pain in their calves, limiting their daily life activities.

Diabetics, renal failure patients with ulcers or sores.

Patients with non-healing sores, ulcers in their feet.

Gangrene in the toes/foot.

### **POSSIBLE RISKS AND COMPLICATIONS:**

The risks and complications include but are not limited to: bleeding, wound problems, dehiscence, infection, seromas in need to aspirate, return to the operating room to find the leaking lymph channel and tie it off, not always successful, need for vacuum assisted device (Wound Vac), infection of the graft, need for debridement's, wound care, muscle flaps, antibiotics, explants the graft and re-do the procedure to re-vascularize the limb, thrombosis of the bypass graft in need for thrombolysis (dissolve the clot), thrombectomy the graft (remove the thrombus/clot from the graft), revision of the bypass, more surgical procedures, re-do the operation/bypass, risk of limb loss/amputation (below or above the knee), clots in the deep venous system-Deep Vein Thrombosis (DVT) with risk that they can migrate and go to the lungs Pulmonary Embolism (PE) that may be fatal, pneumonia, heart problems and myocardial infarction, stroke, death.

### **DISCHARGE INSTRUCTIONS:**

Patient should walk as much as possible, you can resume your normal activities, you will be the "judge" of how much you can do, do not overdo it, do not perform strenuous exercises, no heavy lifting more than 15-20 pounds, do what you feel is comfortable for you without abusing/overdoing it, elevate the limb when possible to avoid further swelling (edema), if edema is a problem we can prescribe support stockings, maintain clean wounds, may shower 48 hours after surgery, wash the wounds with soap and water, pat them dry and keep them clean, apply new dry dressings-gauze in the groin wound to keep the area clean and dry, steri-strips will fall off in 7-10 days or you can soak them off in the shower after 10 days, resume the pre-op medications unless indicated different by the surgeon, follow up in 10-15 days with the surgeon (call for an appointment as soon as possible sooner if needed), if you are taking pain medication, this might bind your bowels and make you constipated, take over the counter stool softeners (Milk of Magnesia, Docusate, Ex-Lax, fiber and fluids), follow up with your primary care physician also at some point soon after the surgery to readjust medications if needed.

### **WHEN TO NOTIFY YOUR SURGEON OR RETURN TO THE EMERGENCY ROOM**

1. Redness, discharge of thick serous or purulent, yellowish, foul smelling fluid, warmth around or within the wounds.
2. Fever or chills, temperature above or equal to 101.5 F or 38.5 C.
3. Wounds that may start to open (dehiscence).
4. Extreme edema-swelling or pain on the operated limb.
5. Discoloration, pale, bluish limb/toes.
6. Change in temperature, cold limb, excessive pain and numbness, unable to move the foot/toes, unable to feel pulses if they were palpable and the patient knew how to feel for them.
7. Any other abnormal feeling/problem that may be related to the operation.