

## Lower Limb Bypass Surgery

(Femoral-popliteal or tibial Bypass)  
(Femoral to Femoral crossover graft)

### Atherosclerosis:

Is also known as hardening of the arteries, which occurs in patients with risk factors such as high cholesterol and high blood pressure. With atherosclerosis the arteries are damaged and build up a plaque that narrows the artery also known as stenosis. That can progress to blockage of the artery leading to lack of blood supply of the organs

In the legs, blockage of the arteries can lead to

- Claudication: crampy pain on walking a certain distance. Usually affect the calves but could also be the thighs and the buttocks
- Rest pain: constant pain in the feet day and night requiring morphine to ease it
- Ulcers: in the feet or the calves. These ulcers are painful and do not heal for a long time
- Gangrene: black discolouration of the toes or feet.

### Treatment:

- Optimize control of high blood pressure and diabetes
- Drugs to lower cholesterol even if normal
- Antiplatelet like Aspirin or Plavix
- Smoking cessation
- Exercise program
- Investigations with ultrasound, CT scan or angiogram

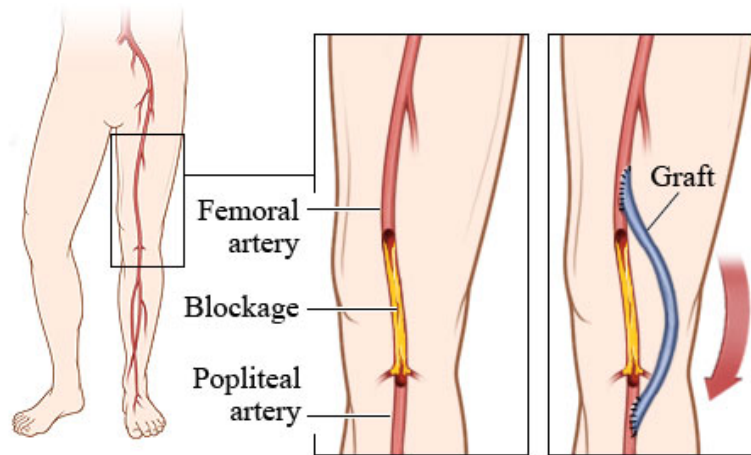
Most patients with claudication can be treated non operatively, however most patients with advanced disease suffering from rest pain, ulcers or gangrene will require a more aggressive treatment with angioplasty (balloon used to open the narrowed part of the artery), or bypass surgery

### **Before surgery:**

- Complete history and examination
- Investigations including ultrasound and CT scan or angiogram
- Consultation with the anaesthetist to confirm fitness for surgery

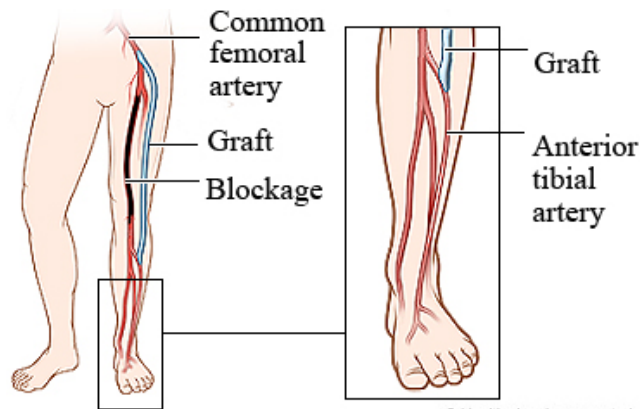
### **The surgery:**

- Usually admission on the day of surgery or a day before if clinically indicated
- General or spinal anaesthetic
- You will be given antibiotics
- The arteries will be exposed and you be given heparin to thin your blood
- A graft from your vein or synthetic one will be prepared and tunnelled underneath the skin or deep to the muscles
- The arteries will be opened, and the graft will be attached to each end above and below the blockage
- A wound drain will remain for at least 24 hrs
- The skin will be closed with sutures under the skin that do not need to be removed
- A wound dressings



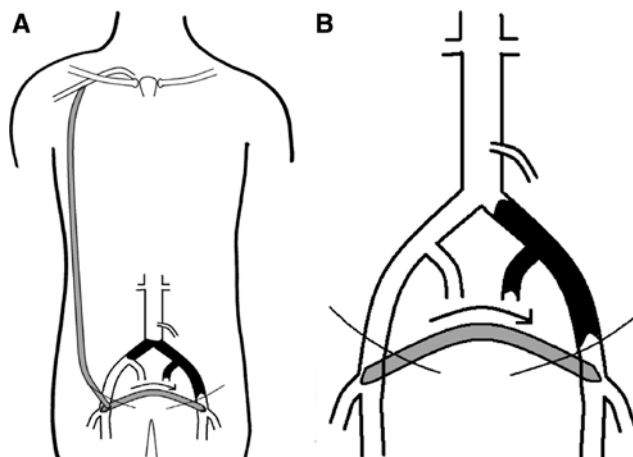
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Femoropopliteal bypass



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Femoral to tibial bypass graft



**Left ( Axillofemoral bypass)  
Right (femorofemoral crossover graft)**

**After the surgery:**

- You will be monitored closely
- The wound and drain will also be monitored
- You will continue taking your Aspirin
- You will be allowed to have some water and later dinner
- Next day, the drain will be removed if no or minimal drainage
- You will be given blood thinner to prevent deep vein thrombosis
- On the second day, you will be encouraged to get out of bed
- Recovery time ranges from 3-7 days but could be longer if ulcers need further treatment
- In 6 weeks you will be reviewed to perform an ultrasound scan of the graft
- Most patients will recover during the 6 weeks following the surgery
- Gentle activities like walking and shopping are advised
- Driving 3-6 weeks if no complications

**Risks and complications:**

- Bleeding requiring return to theatre less than 3%
- Bruising usually settles down
- Wound infection less than 5%
- Leg swelling
- Heart attack
- Chest infection
- Graft blockage or infection
- Non healing of the ulcers
- Groin complications for e.g. infection, fluid collection or wound breakdown
- Numbness along the inner sole of the foot due to nerve injury
- Need for further interventions to keep the graft functioning
- Deep vein thrombosis and/or pulmonary embolism

- Amputation if the graft fails
- Death around 5%

### **Mobility:**

- You are encouraged to walk following your surgery to prevent deep vein thrombosis or chest infection.

### **Care for your incision:**

- Please make sure you wash your hands before handling the dressings
- The dressings will need to be changed once daily for 7 days
- The dressings is water proof so you can have a shower or a wash
- After 7 days the incision can be left to dry or covered for protection against injury or rubbing
- Inspect the wound for any sign of separation, redness, swelling or pus
- If there is increase pain or any of the above signs, cool and cold leg, pale foot or lack of sensation please contact my rooms or see your family doctor.

### **Activities:**

- Gentle, around home activities should be well tolerated
- No heavy lifting or excessive sports
- Driving is resumed when able to apply the brakes with no pain or restriction, generally after 3-6 weeks
- Return to work depends on the type of work and required tasks.  
Generally 3-6 weeks for complete recovery.

**If you develop any of those symptoms, please call the above number, Call the duty manager of the hospital where you had the procedure, present to the emergency department or see your GP.**

For further information, please visit my website [www.AdvancedVascular.com.au](http://www.AdvancedVascular.com.au)