VASCULAR

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HBCIS UNITS:
VASC – Vascular Surgery
RVAS – Vascular Robina
VVAS – Vascular Varsity

Peripheral Vascular Disease ACS0941

Excludes coronary disease – see ACS 0940

Causes the narrowing or blockage of blood vessel. Most often caused by atherosclerosis and affecting legs, kidneys and possibly arms.

Diabetes is often associated with PVD, apply ACS 0401

PVD I70.2- Coding Rules, June 2014

More than one I70.2- code may be assigned where multiple manifestations of PVD are documented.

Thrombectomy and embolectomy of multiple arteries – Coding Rules, March 2015

- Site specific procedure codes should be assigned when multiple vessels are performed on different lesions eg: thrombus of tibial and femoral artery.
- A code for insertion of stent should be assigned in addition to the thrombectomy/embolectomy as there are two different conditions/lesions.
- This includes note 'that with stenting' only applies if the stenting is performed to the same artery.
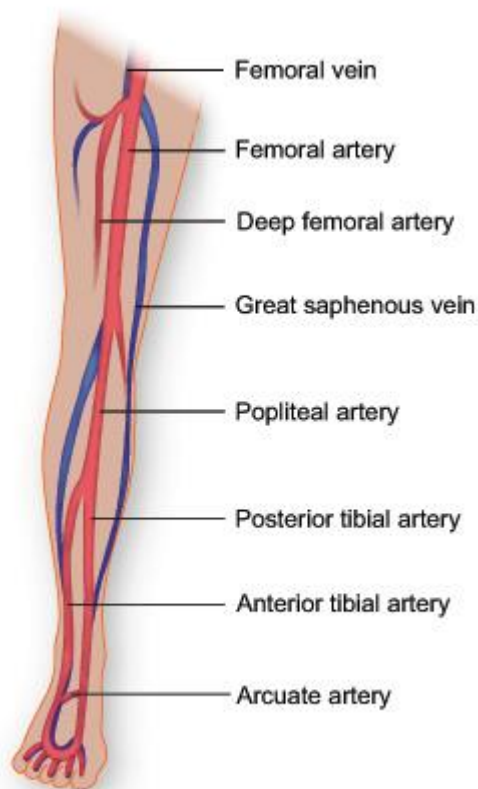
Percutaneous Balloon Angioplasty (PCBA)

Involves a catheter advancing into the narrowed blood vessel, the balloon is inflated and widens the blood vessel to improve blood flow. Can be often associated with a stent which is implanted inside the diseased vessel, which opens the blood vessel to allow blood flow, some stents are drug eluting stents.
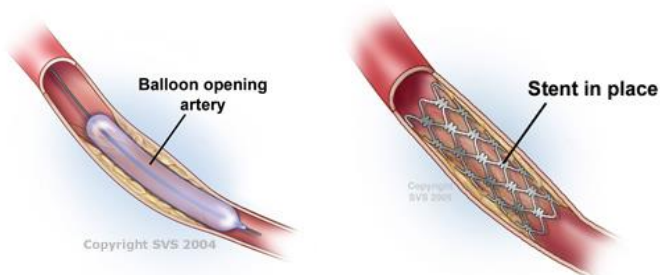
Procedure codes distinguish between single stent and multiple stents – see block [754]
See PVD angioplasty and stent video: https://www.youtube.com/watch?v=UOXQbF3K56g

Bypass Grafts

A section of healthy vein is taken from another part of the body and surgically grafted to re-route blood flow around the blocked blood vessel.

Three examples of typical bypass surgery.

The blockages are shown in green and the bypasses are shown in red.

Aorto-Bifemoral Bypass   Femoral-Popliteal Bypass   Femoro-Fermoral Crossover
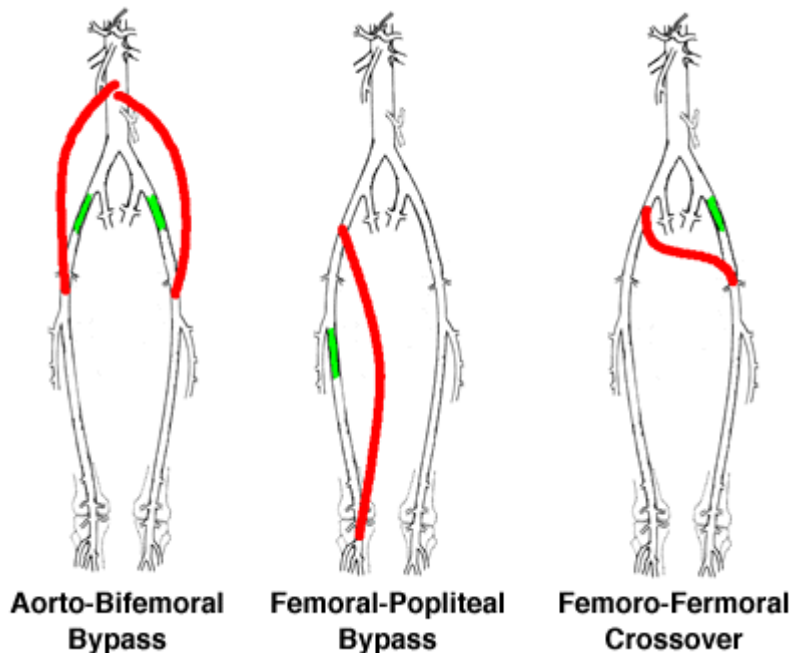
Bypass can be from:

- composite graft – vein and synthetic material used
- Synthetic material – look for PTFE (polytetrafluoroethylene) or similar.
- vein
- crossover – from one leg to another eg: femoral to femoral
- Sequential – skip graft used where an additional anastomosis is made to separately revascularise more than one artery.
- Code an endarterectomy to prepare the site for anastomosis to block [701] if used for bypass preparation.
- Includes closure by suture however code patch grafts, check if arterial/venous and if autologous or synthetic material is being used. Braun patch is synthetic
- Check any includes/excludes notes


NB: check if below knee or above knee

Endartectomy

Endartectomy is the surgical removal of plaque from an artery. An incision is made in the affected artery and removes the plaque contained in the artery lining.

When an endartectomy is performed on other arteries (not for bypass), code these to block [700] excluding coronary.

See carotid endarterectomy video: https://www.youtube.com/watch?v=fGw0oBmmuHM

Femoral Endarterectomy and Patch Angioplasty
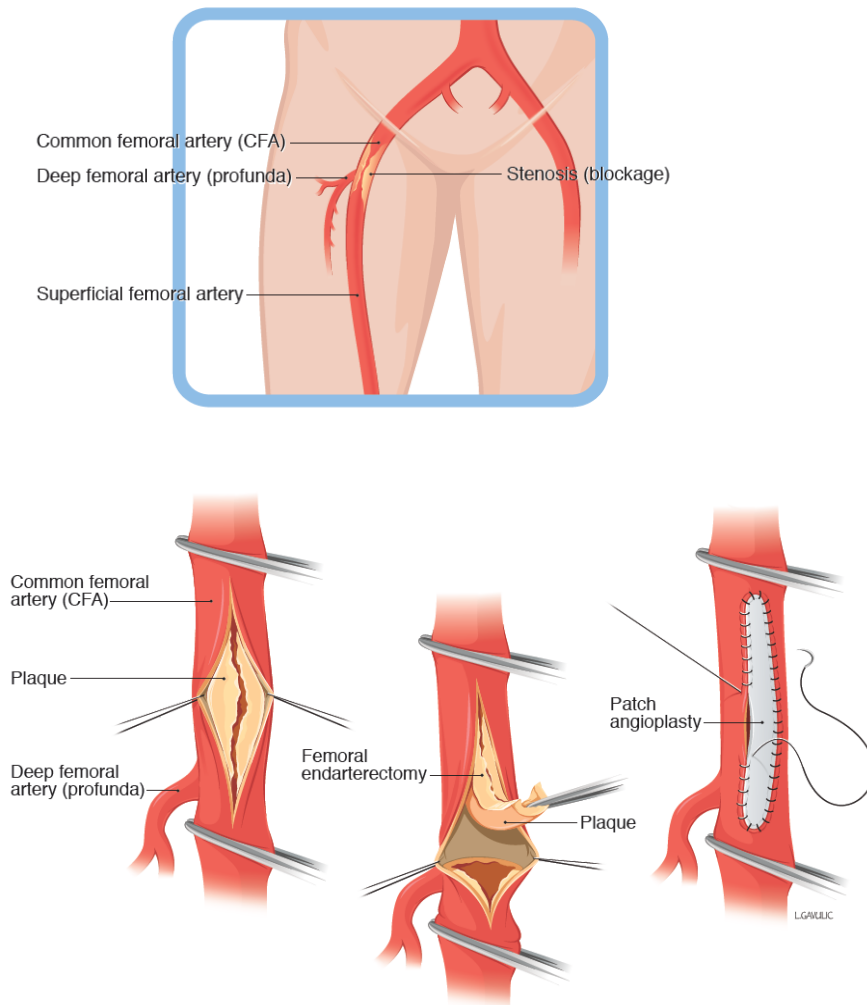
ORIMIS example- (not always documented as patch angioplasty)

Operation Description:
LEFT COMMON FEMORAL ENDARTERECTOMY "CAT 1"
LEFT COMMON FEMORAL ENDARECTOMY & PATCH ANGIOPLASTY

Intermittent Claudication.
MRA: focal CFA stenosis overhanging the PFA origin.

Cefazolin 1g
General anaesthetic

Vertical incision right groin
CFA dissected. Vessels slung. Atheromatous wall ++ with poor pulse.
Heparin 7500U
Clamps to distal EIA, SFA and PFA
Longitudinal arteriotomy and endarterectomy of CFA into proximal SFA
Distal SFA end-point visualised and tacked with 7/0 prolene x2.
PFA origin end-point visualised and tacked with 7/0 prolene x3.
Vein patch (LSV tributary) secured with 5/0 prolene

Haemostasis ensured. Betadine washout / Saline irrigation.(Contamination risk).
Surgicel to patch.
Wound closed in 3 layers with 2/0 vicryl and Subcuticular 3'0 monocryl.

The femoral artery is patched using a vein harvested from LSV tributary. The vein is patching up the hole in the artery.

Graft

-artery

--patch (of bypass graft) (using autologous material) 33548-00 [707]

Aortic aneurysm

Although aneurysms may occur on any arterial part of the body, Aortic aneurysms are more complex to surgically treat.

Three types of Aortic aneurysms: abdominal (AAA), thoracic and thoracoabdominal. After diagnosis, patients will often be monitored with surgery performed if patient becomes symptomatic or imaging reveals the aneurysm is expanding, usually after 5cm in diameter to prevent rupture.

Surgery – abdominal aorta most will be EVAR (endovascular aortic repair).
Involves placing a stent graft into the aorta by small surgical incision (cutdown) or in the groin or percutaneously.

Stent-graft
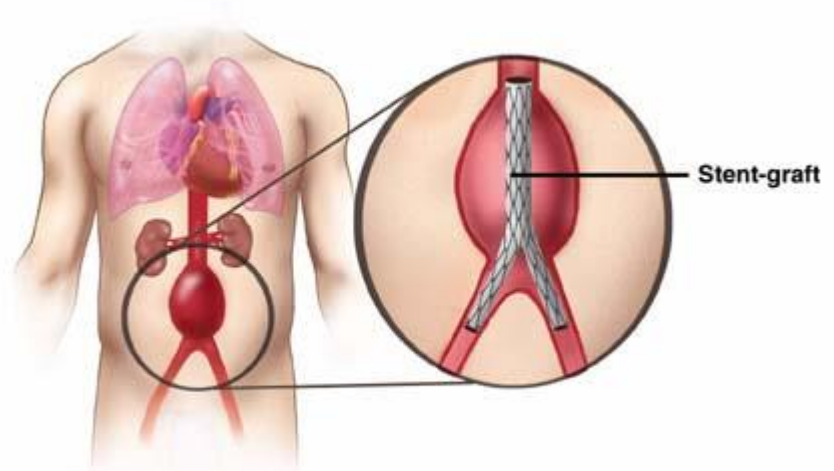
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Bifurcation graft is for abdominal aneurysm and has two branches coming from the bottom that lead to the femoral or iliac arteries. See diagram above.

Amputations

When no other options are available, amputations will be used.

Revision of amputations can refer to debridement of tissue or bone check ORMIS for more specific information. Check excludes notes. Debridement of amputation stump will code to debridement of soft tissue.

NB: check if below knee or above knee

Endoleaks

Endoleaks are associated with endoluminal vascular graft. It is due to the incomplete sealing. These are coded to mechanical complication

Trashing

Trashing often termed 'trashed foot syndrome' or 'blue toe syndrome' often occurs when a AAA repair is done. While the major vessels are clamped off to facilitate the AAA repair, clots can form and when these vessels are released, the clots travel and creates ischaemia. This has to be rectified by doing an immediate embolectomy.

References:

www.vascularweb.org

www.sirweb.org/patients/abdominal-aortic-aneurysms/