Patch angioplasty of an artery is generally performed to prevent narrowing at the site of an arteriotomy though it may be undertaken as an independent procedure to treat a focal area of occlusive disease. Vein, endarterectomized superficial femoral artery, and nonautogenous materials (eg, bovine pericardium, Dacron, or polytetrafluoroethylene) have all been utilized for such an arterial reconstruction. Autogenous patch of an artery in the arm or leg as an independent procedure is described by CPT code 35256 (Repair blood vessel with vein graft; lower extremity), while prosthetic patch angioplasty requires 35286 (Repair blood vessel with graft other than vein; lower extremity). These two CPT codes are sometimes referred to as the “vascular trauma” codes. Remember that the “vein graft” code is appropriate only when a vein is used. The “other than vein” graft material includes endarterectomized artery, prosthetic, bovine pericardium, etc.

Unfortunately, the CPT manual has an introduction at the beginning of the “Arteries and Veins” section just before CPT code 34001 which states “Primary vascular procedure listings include establishing both inflow and outflow by whatever procedures necessary.” This statement means that patch angioplasty (and/or endarterectomy) at the proximal or distal anastomosis of a bypass graft is bundled and not separately reportable.

Nonautogenous vascular grafts may become infected and thereby require surgical removal. Excision of an infected prosthetic bypass in an extremity is reported by CPT code 35903 (Excision of infected graft; extremity). This code description is appropriate for removal of either a hemodialysis access graft or an extremity arterial reconstruction. It is also valid for use in either the upper or lower extremity. Partial excision is possible in specific clinical scenarios leaving the anastomosis(es) intact. Alternatively, complete removal may be necessary leaving a defect in the arterial wall. Since primary closure is often not possible, patch repair may be required to preserve luminal diameter.

According to the American Medical Association/Specialty Society Relative Value Scale Update Committee (or RUC) database as well as the National Correct Coding Initiative, CPT code 35903 bundles patch closure of any vascular defect after removal of the infected prosthetic conduit. Therefore, use of CPT codes 35256 and 35286 are prohibited in the same setting as CPT code 35903 to describe repair of the arteriotomy at the graft excision site.

That said, muscle coverage is sometimes suitable in the setting of infection. When a muscle, myocutaneous, or fasciocutaneous flap is constructed (eg, sartorius muscle flap coverage in the groin), CPT code 15738 would be appropriate to report in addition to CPT code 35903.

When an extremity artery is thrombosed, CPT code 34101 (Embolectomy or thrombectomy, with or without catheter; axillary, brachial, innominate, subclavian artery, by arm incision), CPT code 34201 (Embolectomy or thrombectomy, with or without catheter; femoropopliteal, aortoiliac artery, by leg incision), and CPT code 34203 (Embolectomy or thrombectomy, with or without catheter; popliteal-tibioperoneal artery, by leg incision) describe the majority of open surgical clot extraction but these code descriptions also include any patch arterial closure, if indicated. Common femoral (CPT code 35371), iliofemoral (CPT code 35355), superficial femoral (CPT code 35302), or deep femoral (CPT code 35372) endarterectomy may be performed in the treatment of occlusive disease as an independent revascularization procedure. Patch closure of the vessel with either prosthetic or autogenous material is also bundled with endarterectomy.

Last, femoral artery exposure and subsequent simple repair to facilitate endovascular aortic aneurysm repair is reported with CPT code 34812. When patch angioplasty is necessary after sheath removal during EVAR from a femoral artery, CPT code 35256 (with “vein”) or 35286 (with “other than vein”) would supersede CPT code 34812.