The hostile neck does not increase the risk of carotid endarterectomy

Anatomic high-risk carotid surgery may be due to previous oncologic surgery and/or neck irradiation, re-stenoses after carotid endarterectomy, high carotid bifurcations, or a bull-like, inextensible neck. The authors report their experience with 77 such patients undergoing open carotid revascularization over a 16-year period. They conclude that the majority of patients with hostile neck anatomy can undergo endarterectomy with acceptably low-risk for early or late complications and that durable stroke prevention is not compromised.

The most common procedure described in this manuscript is carotid endarterectomy (CEA) by either a standard longitudinal arteriotomy or an eversion technique. CPT code 35301 (carotid, vertebral, or subclavian artery thromboendarterectomy by a neck incision) is appropriate for both circumstances. Insertion of a prosthetic (Dacron graft or polytetrafluoroethylene) patch is bundled in the base description as is harvest of autogenous vein from a remote site for use in the closure. Shunt insertion, whether elective or on-demand, does not have any additional reimbursement. When a patient has had prior carotid artery surgery, the add-on code 35390 may be reported in addition to 35301 to express the added work associated with reoperative surgery. In 2009, the Center for Medicare and Medicaid Services apportioned an extra 3.19 work relative value units (RVUs) and 4.58 total RVUs as compensation for the additional time and effort.

In some circumstances, CEA is not possible or practical. Operative reconstructions can be performed with autogenous or prosthetic conduit in either an ipsilateral or a crossover fashion. Common carotid to ipsilateral internal carotid artery bypass with vein is reported by CPT code 35501 while a crossover autogenous graft falls under CPT code 35509. Common carotid to ipsilateral carotid artery revascularization with a nonautogenous bypass is described through CPT code 35601. Crossover prosthetic carotid grafting has no specific stand alone code at present and is therefore usually billed using CPT code 35261 (repair blood vessel with graft other than vein; neck). This is not to be confused with CPT code 33891 that specifically depicts a retropharyngeal crossover carotid artery bypass with prosthetic conduit during implantation of a thoracic aortic endograft. When the common carotid artery is not feasible as inflow, a subclavian to carotid bypass with vein is described by CPT code 35506 and a similar reconstruction with nonautogenous conduit is reported by CPT code 35606. The add-on CPT code 35390 listed above is only permitted with CEA (CPT code 35301) and is therefore not appropriate with these cerebrovascular revascularizations.

In the unfortunate event that a patient develops postoperative hemorrhage, exploration of the neck may be required for control of bleeding and evacuation of the resultant hematoma. This operation is best described by CPT code 35800 (exploration for postoperative hemorrhage, thrombosis or infection; neck). If the patient is re-explored on the same day as the CEA, it is reported with a -59 (separate and distinct service) modifier. If the exploration occurs on the following day or any subsequent day within the 90-day global period, a -78 (related procedure in a global period) modifier is required. Keep in mind that the global period starts on the day following the surgery. Therefore, any additional procedures on the day of the endarterectomy are not appropriate for submission using the -78 modifier.

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