Medical Coverage Policy | Carotid
Angioplasty/Stenting Without Embolic Protection

EFFECTIVE DATE: 04|07|2005
POLICY LAST UPDATED: 10|20|2015

OVERVIEW
Carotid artery angioplasty with stenting (CAS) is a treatment for carotid stenosis that is intended to prevent future stroke. It is an alternative to medical therapy and a less invasive alternative to carotid endarterectomy (CEA).

MEDICAL CRITERIA
Not applicable

PRIOR AUTHORIZATION
Not applicable

POLICY STATEMENT
BlueCHiP for Medicare and Commercial Products
Carotid angioplasty without embolic protection is considered not medically necessary as there is insufficient peer-reviewed scientific literature that demonstrates that the procedure is effective.

COVERAGE
Benefits may vary between groups/contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage, or Subscriber Agreement, for applicable surgical coverage/benefits.

BACKGROUND
Carotid artery angioplasty with stenting is a treatment for carotid stenosis that is intended to prevent future stroke. It is an alternative to medical therapy and a less-invasive alternative to carotid endarterectomy.
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Combined with optimal medical management, carotid angioplasty with or without stenting has been evaluated as an alternative to carotid endarterectomy. Carotid angioplasty and stenting involves the introduction of coaxial systems of catheters, microcatheters, balloons, and other devices. The procedure is most often performed through the femoral artery, but a transcervical approach can also be used to avoid traversing the aortic arch. The procedure typically takes 20–40 minutes. Interventionalists almost uniformly use an embolic protection device (EPD) designed to reduce the risk of stroke caused by thromboembolic material dislodged during CAS. Embolic protection devices can be deployed proximally (with flow reversal) or distally (using a filter). Carotid angioplasty rarely is performed without stent placement.

Proposed advantages of CAS over CEA include:

- General anesthesia is not used (although CEA can be performed under local/regional anesthesia)
- Cranial nerve palsies are infrequent sequelae (although almost all following CEA resolve over time)
- Simultaneous procedures may be performed on the coronary and carotid arteries

The U.S. Food and Drug Administration (FDA) has approved carotid artery stents and EPDs from various manufacturers. Each FDA-approved carotid stent is indicated for combined use with an EPD to reduce risk of stroke in patients considered to be at increased risk for periprocedural complications from CEA who are symptomatic with greater than 50% stenosis, or asymptomatic with greater than 80% stenosis—degree of stenosis being assessed by ultrasound or angiogram with computed tomography (CT) angiography also

sometimes used. Patients are considered at increased risk for complications during CEA if affected by any item from a list of anatomic features and comorbid conditions included in each stent system's Information for Prescribers.

FDA-approved stents and EPDs differ in the deployment methods used once they reach the target lesion, with the RX (rapid exchange) devices designed for more rapid stent and filter expansion. The FDA has mandated postmarketing studies for these devices, including longer follow-up for patients already reported to the FDA and additional registry studies, primarily to compare outcomes as a function of clinician training and facility experience. Each manufacturer's system is available in various configurations (e.g., straight or tapered) and sizes (diameters and lengths) to match the vessel lumen that will receive the stent.

On April 30, 2007, a decision memo reaffirmed the Centers for Medicare and Medicaid Services (CMS) previous decision following a request to expand coverage while clarifying that "CAS is only covered when used with an embolic protection device and is, therefore, not covered if deployment of the distal embolic protection device is not technically possible." On October 14, 2008 in the sixth reconsideration, and on December 9, 2009 in the seventh reconsideration, CMS reaffirmed their prior coverage decisions.

CODING

BlueCHiP for Medicare and Commercial Products
The following CPT code is not medically necessary:
37216

RELATED POLICIES

Preauthorization via Web-Based tool for Procedures

PUBLISHED

Provider Update, December 2015
Provider Update, January 2015
Provider Update, September 2013
Provider Update, December 2012
Provider Update, May 2011
Provider Update, June 2010
Provider Update, June 2009
Provider Update, September 2008

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