**Medical Coverage Policy** | Anastomosis of Extracranial-Intracranial Arteries



**EFFECTIVE DATE:** 12|14|2014 **POLICY LAST REVIEWED:** 02|21|2024

## **OVERVIEW**

This policy documents the coverage criteria for anastomosis of the extracranial-intracranial arteries. In this procedure, the physician anastomoses the arterial and extracranial-intracranial arteries. The physician performs a craniotomy in the affected area and locates the arteries to be anastomosed and dissects them from the surrounding tissue.

#### **MEDICAL CRITERIA**

Anastomosis of the extracranial-intracranial arteries is covered for all conditions other than atherosclerosis.

#### **PRIOR AUTHORIZATION**

Prior authorization is required for Medicare Advantage Plans and recommended for Commercial Products for atherosclerosis and is obtained via the online tool for participating providers. See the Related Policies section.

#### **POLICY STATEMENT**

# Medicare Advantage Plans and Commercial Products

Extracranial-Intracranial (EC-IC) arterial bypass surgery is not a covered procedure for Medicare Advantage plans and not medically necessary for Commercial Products when it is performed as a treatment for ischemic cerebrovascular disease of the carotid or middle cerebral arteries, which includes the treatment or prevention of strokes as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Anastomosis of the extracranial-intracranial arteries for other indications are covered.

#### **COVERAGE**

Benefits may vary between groups/contracts. Please refer to the appropriate section of the Benefit Booklet, Evidence of Coverage or Subscriber Agreement for services not medically necessary.

#### BACKGROUND

**Intracranial atherosclerotic disease** is the narrowing or obstruction of arteries within the skull that supply the brain. It is caused by atheromatous plaques in the innermost layer of the arterial wall, called the endothelium. Intracranial atherosclerotic disease can lead to transient ischemic attack (TIA), stroke, or death, and is usually diagnosed in patients who have presented with a TIA or stroke. Intracranial atherosclerotic disease is usually treated with anticoagulant therapy (i.e., warfarin) or antiplatelet therapy (e.g., aspirin), together with medication to control risk factors for atherosclerosis.

**Extracranial vascular disease** refers to atherosclerosis, which is a hardening and narrowing of the walls of these vessels, due to deposits of fats that form plaques within the arteries. As the plaque deposits gradually enlarge, they interfere with blood flow. Atherosclerosis can affect any large-to-medium-sized artery in the body and cause serious health problems. It is especially dangerous in the extracranial arteries that supply the brain, as decreased blood flow to the brain can result in stroke. A minority of subjects with elevated LDL and cholesterol levels will develop clinical disease, and up to 50% of cases of coronary artery disease (CAD) occur in subjects with "normal" levels of total and LDL cholesterol. Thus, there is considerable potential to improve the accuracy of current cardiovascular risk prediction models.

A study by the EC/IC Bypass Study Group (1985) failed to confirm the hypothesis that extracranialintracranial anastomosis is effective in preventing cerebral ischemia in patients with atherosclerotic arterial disease in the carotid and middle cerebral arteries.

The premise that this procedure which bypasses narrowed arterial segments improves the blood supply to the brain and reduces the risk of having a stroke has not been demonstrated to be any more effective than no surgical intervention. Accordingly, EC-IC arterial bypass surgery is not considered reasonable and necessary within the meaning of §1862(a)(1) of the Act when it is performed as a treatment for ischemic cerebrovascular disease of the carotid or middle cerebral arteries.

## CODING

The following code is not covered for Medicare Advantage Plans and not medically necessary for Commercial Products when used for not covered/not medically necessary indication in this policy: 61711 Anastomosis, arterial, extracranial-intracranial (e.g., middle cerebral/cortical) arteries

## **RELATED POLICIES**

Prior Authorization via Web-Based Tool for Procedures

## PUBLISHED

Provider Update, April 2024 Provider Update, March 2023 Provider Update, April 2021 Provider Update, May 2020 Provider Update, June 2019

## REFERENCES

1. CMS.Gov Centers for Medicare and Medicaid Services National Coverage Determination (NCD) for Extracranial-Intracranial (EC-IC) Arterial Bypass Surgery (20.2):

http://www.cms.gov/medicare-coverage-database/details/ncd-

details.aspx?NCDId=54&ncdver=1&bc=AgAAgAAAAAAAAA%3d%3d&

2. The EC/IC Bypass Study Group. Failure of extracranial-intracranial arterial bypass to reduce the risk of ischemic stroke. Results of an international randomized trial. New England Journal of Medicine; 1985 Nov 7; 313(19):1191-2000. http://www.nejm.org/doi/full/10.1056/NEJM198511073131904

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