



MEDICAL POLICY

Date Reviewed: 02/16/07, 05/18/07, 05/15/08, 04/24/09, 04/28/10, 04/15/11

Subject: Intracranial and Vertebral Artery Angioplasty and Stenting

Description: Angioplasty is an invasive procedure used to treat stenosis (narrowing) or occlusion (blockage) of blood vessels throughout the body. A small balloon is inflated in the area of stenosis or occlusion to increase the diameter of the lumen (opening) and improve blood flow. A stent is an expandable wire mesh tube that may be used in the area of stenosis to limit restenosis (repeat narrowing) of the blood vessel. Angioplasty of the intracranial arteries has been used to treat cerebral vasospasms (spasms of the blood vessels causing narrowing) and individuals with stenosis of arteries that may lead to stroke.

Indications of Coverage:

Intracranial angioplasty in symptomatic individuals with greater than 70% stenosis of an intracranial artery requires physician review. Angioplasty or stenting of an intracranial artery in any other situation is not covered.

Limitations of Coverage:

Review contract and endorsements for exclusions and prior authorization or benefit requirements.

If used for a condition/diagnosis other than is listed in the Indications of Coverage, deny as experimental or investigative.

If used for a condition/diagnosis that is listed in the Indications of Coverage, but the criteria are not met, deny as not medically necessary.

Documentation required:

Procedure report

Rationale: Stenosis of intracranial blood vessels is less frequent than in other arteries of the body, but is associated with a high risk for stroke. Intracranial stenosis is usually treated with medication, but when the medications are ineffective, angioplasty has been reported to be useful. It has also been suggested that the placement of a stent may reduce the rate of restenosis in intracranial arteries. Angioplasty and stenting of the intracranial arteries has also been evaluated for the management of vasospasm following aneurysmal subarachnoid hemorrhage. Endovascular treatment of the intracranial arteries, however, is associated with a significant risk of complications. The US Food and Drug Administration approved several intracranial stent systems as Humanitarian Device Exemptions. Several studies have evaluated the effectiveness of angioplasty and stenting of intracranial arteries and have recommended further research through controlled clinical trials. At this time, the benefit of intracranial balloon angioplasty, with or without stenting, has not been established.

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Approved by the Medical Director