Medical Policy

Blue Cross Blue Shield Blue Care Network of Michigan

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Joint Medical Policies are a source for BCBSM and BCN medical policy information only. These documents are not to be used to determine benefits or reimbursement. Please reference the appropriate certificate or contract for benefit information.

Category: Radiology

Title: Cerebral Vascular Flow

Procedure Code(s): 78615

Description / Background

Cerebral vascular flow measures the blood flow to the brain. It is a technique that has been used for several decades, primarily for assessing cerebral blood flow during neurological and cardiovascular surgical procedures. It involves the injection or inhalation of $Xenon^{133}$ gas, a radioactive isotope, with subsequent measurement of the gamma emissions using a scintillation detector. A clearance curve is then obtained, and various methods are used to calculate cerebral blood flow from this information.

CPT / HCPCS Level II Codes and Description

78615	Cerebral vascular flow
Q3004	Supply of radiopharmaceutical diagnostic imaging agent xenon XE 133, per 10 microcurie

Diagnoses / Medical Conditions

None specified

Medical Policy Statement

Cerebral vascular flow studies have been established as a safe and effective diagnostic option for the intraoperative or bedside measurement of cerebral blood flow.

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Rationale

A cerebral vascular flow study is a relatively simple, noninvasive and accurate method of determining the amount of blood flow to the brain. The information may influence the course of treatment for a patient.

Medical Policy Position Summary (Non-clinical summary statement for customer use)

Cerebral vascular flow studies have been established as a safe and effective diagnostic option for the intraoperative or bedside measurement of cerebral blood flow.

Inclusionary and Exclusionary Guidelines (Clinically based guidelines that may support individual consideration and pre-authorization decisions)

N/A

Related Policies

N/A

Medicare Information

Medicare has no specific national or local medical review policy on cerebral vascular flow studies. They are considered covered services if done in accordance with Medicare guidelines.

(The above Medicare information is current as of the review date for this policy. However, the coverage issues and policies maintained by the Centers for Medicare & Medicare Services [CMS, formerly HCFA] are updated and/or revised periodically. Therefore, the most current CMS information may not be contained in this document. For the most current information, the reader should contact an official Medicare source.)

References

- Department of Neurosurgery, University of Texas-Houston.
- http://www.hcfa.gov/pubforms/transmit/b0128.pdf HCFA Program Memorandum Carriers, Transmittal B-01-28, Change Request 850, April 19, 2001.
- http://www.ispub.com/journals/IJEICM/Vol4N2/xenon.html The Internet Journal of Emergency and Intensive Care MedicineTM, Stable Xenon Computed Tomography Cerebral Blood Flow Measurement In Neurological Disease: Review And Protocols; M. Joseph, MD.

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- http://www.neurosurgery.org/focus/nov00/9-5-4.pdf, “Techniques of intraoperative cerebral blood flow measurement,” Friedman, Jonathan A., MD, et al, Neurosurg Focus 9 (5): Article 4 2000.
- http://www.radiopharm.com/pdf/Xe%20133%20Gas%20PI.pdf DuPont Pharmaceuticals Company Medical Imaging, 331 Treble Cove Rd., Billerica, MA, USA 01862; XENON Xe 133 GAS FOR DIAGNOSTIC USE, August 1998.
- Joseph, M. & Nates, J. L. Stable Xenon Computed Tomography Cerebral Blood Flow Measurement In Neurological Disease: Review and Protocols. The Internet Journal of Emergency and Intensive Care Medicine 2000 Vol4N2:

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Joint BCBSM/BCN Medical Policy History

Date	Rationale
6/25/02	Joint medical policy established
11/18/03	Policy retired; see comment below

Next Review: This policy is established and is no longer subject to periodic review.

Pre-Consolidation Medical Policy History

Original Policy Date		Comments
BCN	N/A	Revised: N/A
BCBSM	4/16/01	Revised: N/A

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BLUE CARE NETWORK
POLICY: CEREBRAL VASCULAR FLOW

I. Coverage Determination:

Cerebral vascular flow studies are covered benefits for intraoperative or bedside measurement of cerebral blood flow.

II. Benefit Information:

Appropriate hospital copayments will apply

- BCN 1, BCN 5, BCN 5 Michigan Catholic Conference, FEP – no copayment
- BCN 10, BCN Non-Group, Personal Plus – The hospital copayment is 25% of all hospital-billed fees for facility, professional and related services received while an inpatient and for outpatient surgery. All copayments made for hospital-billed fees apply to a hospital copayment maximum. Once the maximum is reached, no copays will be taken for hospital-billed services for the rest of the year.
- BCN Basic – All hospital inpatient and outpatient services are subject to a 20% copayment. Where more than one service is provided at one time, all the applicable copayments apply. Certain copayments will accumulate toward an annual copayment. Once the annual copayment maximum is reached in any calendar year, the copayments for benefits that are described as applicable toward the annual copayment maximum are waived.

III. Benefit Exclusions:

N/A

IV. Administrative Guidelines:

- The member's contract must be active at the time the service is rendered.
- The service must be authorized by the member's PCP except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Services must be performed by a BCN-contracted provider, if available, except for Self-Referral Option (SRO) members seeking Tier 2 coverage.
- Appropriate copayments will apply
- CPT - HCPCS codes are used for descriptive purposes only and are not a guarantee of coverage.
- Payment is based on BCN payment rules, individual certificate benefits and certificate riders.

V. Effective Date:

Policy taken off routine review schedule: 11/18/03
Joint policy effective date: 6/25/02
Supersedes benefit information of: N/A

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