Diagnosis and Treatment of Chronic Cerebrospinal Venous Insufficiency in Multiple Sclerosis

Medical Benefit

Effective Date: 07/01/12
Next Review Date: 03/13

Preauthorization*

No
Review Dates: 03/12

The following Protocol contains medical necessity criteria that apply for this service. It is applicable to Medicare Advantage products unless separate Medicare Advantage criteria are indicated. If the criteria are not met, reimbursement will be denied and the patient cannot be billed. Preauthorization is not required but is recommended if, despite this Protocol position, you feel this service is medically necessary; supporting documentation must be submitted to Use Management.* Please note that payment for covered services is subject to eligibility and the limitations noted in the patient’s contract at the time the services are rendered.

Description

Questions are being asked about the possible role of chronic cerebrospinal venous insufficiency (CCSVI) in the pathogenesis of multiple sclerosis (MS), and correction of CCSVI is being evaluated as a possible treatment for MS. Correction of CCSVI may be referred to as the “Liberation Procedure.”

Background

Multiple sclerosis (MS) is generally considered a chronic inflammatory demyelinating disease of the central nervous system (brain, spinal cord, optic nerve) felt to be triggered by an autoimmune response to myelin.

However, in part due to the periventricular predilection of the lesions of multiple sclerosis, vascular etiologies (chronic cerebrospinal venous insufficiency [CCSVI]) have also been considered. An animal model for MS was developed by injecting obstructing agents into the venous sinuses. This etiology, and treatment approach, for MS had not been actively pursued for many years; recent reports by a European researcher have renewed interest in this topic.

The core foundation of this vascular theory is that there is abnormal venous drainage from the brain due to outflow obstruction in the draining jugular vein and/or azygos veins. This abnormal venous drainage, which is characterized by special ultrasound criteria is said to cause intracerebral flow disturbance or outflow problems that lead to periventricular deposits. In the CCSVI theory, these deposits have a similarity to the iron deposits seen around the veins in the legs in patients with chronic deep vein thrombosis. Those studying this theory have promoted balloon dilatation, with or without stenting, to treat the outflow problems, thereby curing CCSVI and by the same token alleviating MS complaints.

Corporate Medical Guideline

The identification and subsequent treatment of chronic cerebrospinal venous insufficiency (CCSVI) in patients with multiple sclerosis is considered investigational.

Services that are the subject of a clinical trial do not meet our Technology Assessment Protocol criteria and are considered investigational. For explanation of experimental and investigational, please refer to the Technology Assessment Protocol.
It is expected that only appropriate and medically necessary services will be rendered. We reserve the right to conduct prepayment and postpayment reviews to assess the medical appropriateness of the above-referenced procedures. Some of this Protocol may not pertain to the patients you provide care to, as it may relate to products that are not available in your geographic area.

References

We are not responsible for the continuing viability of web site addresses that may be listed in any references below.


6. Fox RJ, Rae-Grant A. Chronic cerebrospinal venous insufficiency: have we found the cause and cure of MS? Neurology 2011 Apr 13 [Epub ahead of print].