



Canadian Society for Vascular Surgery Position Statement on the Diagnosis and Management of Chronic Cerebrospinal Venous Insufficiency in Patients with Multiple Sclerosis

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Background:

There has been a recent surge of interest in the media and medical community regarding a possible connection between blockage of veins draining the brain and spinal cord, and symptoms of multiple sclerosis (MS). Dr Paolo Zamboni from the University of Ferrara in Bologna, Italy identified five ultrasound features that may be associated with impaired venous drainage from the central nervous system (CNS)^{1,2}. He has hypothesized that compromised CNS venous outflow causes extra-vascular iron deposition, thus inciting perivenous inflammation which then leads to symptoms of MS³. Dr Zamboni has correlated abnormal venous drainage from the CNS seen on ultrasound with venographic stenosis of extracranial veins^{2,4}. It was reported that endovascular treatment of narrowed internal jugular or azygous veins improved MS clinical outcome measures⁴. Conversely, other investigations have NOT shown that MS patients have evidence of blocked or insufficient cerebrospinal veins using both ultrasound⁵ and magnetic resonance imaging⁶. To date, no randomized, blinded and well-controlled study has been published linking chronic cerebrospinal venous insufficiency (CCSVI) and angioplasty of extracranial venous stenosis to MS or the alleviation of MS symptoms.

Position statements:

Based on available evidence, the consensus opinion of members of Canadian Society for Vascular Surgery (CSVS) regarding CCSVI and MS includes the following:

1. Conclusive evidence in the form of rigorous, scientifically valid clinical trials linking CCSVI and MS is lacking. Furthermore, the safety and durability of angioplasty of extracerebral venous outflow structures is not well documented.
2. The CSVS understands that the precise cause of MS has not been conclusively defined. Furthermore, the CSVS recognizes the concerns of those affected by MS, a progressive illness without a known cure.
3. The CSVS supports and encourages well-designed clinical studies in order to better understand a possible relationship between CCSVI and MS, and to determine whether angioplasty of extracerebral venous outflow structures is effective, safe, and durable.

References:

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