Buffalo Neuroimaging Analysis Center

Chronic Cerebrospinal Venous Insufficiency (CCSVI) Research

The Buffalo Neuroimaging Analysis Center (BNAC) is committed to pioneering research in chronic cerebrospinal venous insufficiency (CCSVI) and understanding role of extra-cranial venous system in neurological disorders. Below are links to published articles and abstracts on CCSVI or role of extra-cranial venous system by the BNAC research team. Also listed are items that have not yet been published, but have been accepted for publication and are in press. Some published research is copyright protected and available only to subscribers of the journals in which they are published. Others are part of free text journals in the public domain and available by searching PubMed. The list of all BNAC CCSVI affiliated publications will be updated regularly.

PUBLISHED ARTICLES

Funding CCSVI research is/was a waste of valuable time, money and intellectual energy - No.

Jugular venous reflux and plasma endothelin-1 are associated with cough syncope: a case control pilot study.
Available through PMID: 23324129

No association between conventional brain MRI and CCSVI in multiple sclerosis.
Available through PMID: 22576891

Sensitivity and specificity of SWI venography for detection of cerebral venous alterations in multiple sclerosis.
Available through PMID: 22709857

Cine cerebrospinal fluid imaging in multiple sclerosis.
Available through PMID:22733409

Revised February 11, 2013
Role of venoplasty for treatment of multiple sclerosis: Value of open-label studies and surrogate treatment outcomes.
Available through PMID: 22999749

Heart disease, overweight and cigarette smoking are associated with increased prevalence of extra-cranial venous abnormalities.
Available through PMID: 22971471

Arterial, venous and other vascular risk factors in multiple sclerosis.
Available through PMID: 22971465

Vascular pathology of multiple sclerosis.
Available through PMID: 22971464

Clinical correlates of chronic cerebrospinal venous insufficiency in multiple sclerosis.

Intra- and extra-luminal structural and functional extra-cranial venous anomalies in multiple sclerosis, as evidenced by two non-invasive imaging techniques.
Available through PMID: 22194367

Available through PMID: 21839654

Available through PMID: 22364941
Chronic cerebrospinal venous insufficiency in multiple sclerosis: A historical perspective
Dake MD, Zivadinov R, MD, Haacke EM. Funct Neurol 2011;26:181-195. (CC; PBM)
Available through PMID: 22364939

Risk factors for chronic cerebrospinal venous insufficiency (CCSVI) in a large cohort of volunteers.
Available through PMID: 22140507

Decreased brain venous vasculature visibility on susceptibility-weighted imaging venography in patients with multiple sclerosis is related to chronic cerebrospinal venous insufficiency.
Available through PMID: 22011402

Chronic cerebrospinal venous insufficiency in multiple sclerosis: Diagnostic, pathogenetic, clinical and treatment perspectives.
Available through PMID: 21864074

Prevalence, sensitivity and specificity of chronic cerebrospinal venous insufficiency in MS.
Available through PMID: 21490322

Available through PMID: 21474626

Hypoperfusion of brain parenchyma is associated with the severity of chronic cerebrospinal venous insufficiency in patients with multiple sclerosis: a cross sectional preliminary report.
Available through PMID: 21385345
Chronic cerebrospinal vascular insufficiency is not associated with HLA-DRB*1501 status in multiple sclerosis patients

Use of magnetic resonance venography for characterization of the extra-cranial venous system in patients with multiple sclerosis and healthy controls

Chronic cerebrospinal venous insufficiency and iron deposition on susceptibility-weighted imaging in patients with multiple sclerosis: a pilot casecontrol study

Use of neck magnetic resonance venography, Doppler sonography and selective venography for diagnosis of chronic cerebrospinal venous insufficiency: a pilot study in multiple sclerosis patients and healthy controls

CSF dynamics and brain volume in multiple sclerosis are associated with extracranial venous flow anomalies: a pilot study

Transcranial sonography of deep gray nuclei: a new outcome measure in multiple sclerosis?

The severity of chronic cerebrospinal venous insufficiency in patients with multiple sclerosis is related to altered cerebrospinal fluid dynamics
CORRESPONDENCE

Unclear value of positional MR angiography in evaluating cerebral venous outflow hemodynamics.
Available through PMID: 22282442

Regarding CCSVI and MS: A never-ending story or a new chapter?
Available through PMID: 22177011

Regarding CCSVI: Is blinding the key?
Available through PMID: 22177010

Prevalence, sensitivity, and specificity of chronic cerebrospinal venous insufficiency in MS.
Available through PMID: 22105958

Chronic cerebrospinal venous insufficiency: Have we found the cause and cure of MS ?
Available through PMID: 22042799

Comment on no evidence of CCSVI at multiple sclerosis onset.
Available through Pub Med PMID: 21681801


PUBLISHED ABSTRACTS

Sensitivity and specificity of SWI venography for detection of cerebral venous alterations in multiple sclerosis
28th European Committee for Treatment and Research in Multiple Sclerosis, Lyon, France, October 10-13, 2012:P385.

Bi-monthly evolution of cortical atrophy in early relapsing-remitting multiple sclerosis over 2 years; A longitudinal study.
28th European Committee for Treatment and Research in Multiple Sclerosis, Lyon, France, October 10-13, 2012:P385.

Comparison of intravascular ultrasound (IVUS) to gold standard catheter venography (CV) for detection of extra-cranial venous abnormalities indicative of CCSVI: Results of the PREMiSe (Prospective Randomized Endovascular therapy in Multiple Sclerosis) study.
28th European Committee for Treatment and Research in Multiple Sclerosis, Lyon, France, October 10-13, 2012:P632.

Heart disease, overweight and cigarette smoking are associated with increased prevalence of extra-cranial venous abnormalities.
28th European Committee for Treatment and Research in Multiple Sclerosis, Lyon, France, October 10-13, 2012:P634.

Cine cerebrospinal fluid imaging changes in patients with multiple sclerosis after venous angioplasty; A 1-year follow-up study.
28th European Committee for Treatment and Research in Multiple Sclerosis, Lyon, France, October 10-13, 2012:P634.

Prevalence, sensitivity and specificity of chronic cerebrospinal venous insufficiency in other neurological diseases; A case-control study.
28th European Committee for Treatment and Research in Multiple Sclerosis, Lyon, France, October 10-13, 2012:P634.

Prevalence, sensitivity and specificity of chronic cerebrospinal venous insufficiency in pediatric multiple sclerosis.
28th European Committee for Treatment and Research in Multiple Sclerosis, Lyon, France, October 10-13, 2012:P1090.

Risk factors for chronic cerebrospinal venous insufficiency (CCSVI).
Intravascular Ultrasound for detection of Azygous and Internal Jugular vein (IJV) abnormalities as part of the PREMiSe (Prospective Randomized Endovascular therapy in Multiple Sclerosis) study.

Multimodal imaging approach sclerosis for screening of chronic cerebrospinal venous insufficiency in patients with multiple sclerosis

Risk factors for chronic cerebrospinal venous insufficiency (CCSVI) in a large cohort of volunteers

Comparative study of MR venography and doppler sonography in depicting extracranial venous abnormalities in multiple sclerosis patients and healthy subjects.

Multimodal diagnostic correlates between doppler sonography, catheter venography and intravascular ultrasound in detection of venous valve abnormalities during phase I PREMiSe (Prospective Randomized Endovascular therapy in Multiple Sclerosis) study.

Intraluminal and extraluminal extra-cranial structural and functional venous abnormalities in multiple sclerosis patients and healthy controls.

Hypoperfusion of brain parenchyma in CCSVI. 1st Congress of International Society for Neurovascular Disease.

Iron and veins in multiple sclerosis.

The limits of magnetic resonance venography for diagnosis of chronic cerebrospinal venous insufficiency.

Presence and severity of chronic cerebrospinal venous insufficiency is related to lower brain parenchyma venous vasculature visibility on susceptibility-weighted imaging in patients with multiple sclerosis.
Associations of HLA DR*1501 status and chronic cerebrospinal venous insufficiency in multiple sclerosis.

MRI results of blinded chronic cerebrospinal venous insufficiency study in patients with multiple sclerosis, healthy controls and patients with other neurologic diseases.

Increased iron concentration and decreased volume of deep-grey matter are associated with increased disability in patients with multiple sclerosis.

Relation between quantitative venous vasculature assessment on susceptibility-weighted imaging and haemodynamic MRI metrics in multiple sclerosis patients.


Clinical correlates of chronic cerebrospinal venous insufficiency in multiple sclerosis.

Increased iron concentration on susceptibility-weighted imaging is associated with decreased deep-grey matter volumes in patients with multiple sclerosis.

Use of magnetic resonance venography for visualisation of the internal jugular veins in patients with multiple sclerosis diagnosed with chronic cerebrospinal venous insufficiency and treated with percutaneous angioplasty.

Multiple sclerosis patients with chronic cerebrospinal venous insufficiency present with increased iron concentration on susceptibility-weighted imaging in deep-grey matter.
Relation between quantitative venous vasculature assessment on susceptibility-weighted imaging and conventional magnetic resonance metrics in multiple sclerosis patients.

Hypoperfusion of brain parenchyma is strongly associated with the severity of chronic cerebrospinal venous insufficiency in patients with multiple sclerosis.

Chronic cerebrospinal venous insufficiency and iron deposition on susceptibility-weighted imaging in patients with multiple sclerosis.

Quantitative venous vasculature assessment on susceptibility-weighted imaging reflects presence of severe chronic venous insufficiency in the brain parenchyma of multiple sclerosis patients. A case-control study.


Use of magnetic resonance venography for characterization of extracranial venous system in patients with multiple sclerosis and in normal controls. A blinded controlled study

A three-dimensional multi-scale line filter algorithm for segmentation of vein vessels in susceptibility weighted images.

An objective quantification technique of the cerebrospinal fluid (CSF) flow in the cerebral aqueduct, in patients with multiple sclerosis.

Revised February 11, 2013
Quantitative venous vasculature assessment on susceptibility-weighted imaging reflects presence of severe chronic venous insufficiency in the brain parenchyma of multiple sclerosis patients. A case-control study.

Objective quantification of cerebrospinal fluid (CSF) flow rate in cerebral aqueduct in patients with multiple sclerosis

Combined transcranial and extracranial venous doppler evaluation (CTEVD study). Description of the design and interim results of an epidemiological study of the prevalence of chronic cerebrospinal venous insufficiency in MS and related diseases.


Hypoperfusion of brain parenchyma is strongly associated with the severity of chronic cerebrospinal venous insufficiency in patients with multiple sclerosis.

Chronic cerebrospinal venous insufficiency and iron deposition on susceptibility-weighted imaging in patients with multiple sclerosis.

Chronic cerebrospinal venous insufficiency is related to inverted and decreased cerebrospinal fluid flow and greater brain atrophy in patients with multiple sclerosis.

LINKS TO JOURNALS OR CONFERENCE WEBSITES

American Journal of Neuroradiology
http://www.ajnr.org/

Annals of Neurology
http://www.aneuroa.org

BMC Medicine
http://www.biomedcentral.com/bmcmed/

BMC Neurology
http://www.biomedcentral.com/bmcneurol/

European Committee and Research for Treatment in Multiple Sclerosis
http://www.ectrims.eu/

European Journal of Vascular and Endovascular Surgery
http://www.sciencedirect.com/esvs

Expert Review of Neurotherapeutics
http://www.expert-reviews.com/neurotherapeutics

Functional Neurology
http://www.functionalneurology.it/

International Angiology
http://www.minervamedica.it/en/journals/international-angiology/index.php

International Society for Neurovascular Disease
http://www.isnvd.org/

Journal of Magnetic Resonance Imaging
http://www.nrijournal.com/

Journal of Vascular and Interventional Radiology
http://www.jvir.org/

Multiple Sclerosis
http://msj.sagepub.com/

Neurology
http://www.neurology.org/

Neurological Research
http://www.hindawi.com/journals/nri/

PLoS One
www.plos.org

Proceedings of the Society for Magnetic Resonance Medicine
http://www.ismrm.org/

PubMed
www.pubmed.com

Radiology
http://radiology.rsna.org/