



## **MSIF CCSVI Update, 21 December 2010**

### **Opinion poll on CCSVI in Canada**

On Thursday 16 December Angus Reid Public Opinion published the results of an opinion poll examining attitudes towards CCSVI in Canada. The MS society of Canada was not involved in the commissioning of this poll.

<http://www.angus-reid.com/polls/43669/canadians-support-new-procedure-for-multiple-sclerosis-patients/>

[http://www.angus-reid.com/wp-content/uploads/2010/12/2010.12.16\\_MS\\_CAN.pdf](http://www.angus-reid.com/wp-content/uploads/2010/12/2010.12.16_MS_CAN.pdf)

### **German MS Society (DMSG) position statement on CCSVI**

The German MS society have published a statement on CCSVI on their website, and have recently published a news item on CCSVI

#### **Statement**

<http://www.dmsg.de/multiple-sklerose-news/index.php?w3pid=news&kategorie=forschung&anr=2043>

### **Update on CCSVI, June 2010**

<http://www.dmsg.de/multiple-sklerose-news/index.php?w3pid=news&kategorie=forschung&anr=2175>

### **Google translate gives the following translation for the statement:**

New vascular hypothesis of multiple sclerosis?

Current opinion of the Medical Advisory Board of DMSG, Federal Association for the hypothesis of a venous-related cause of multiple sclerosis.

On the hypothesis of a "chronic cerebrospinal venous insufficiency (CCSVI)" as a cause of multiple sclerosis is currently being discussed in many places and in internet forums (see also [www.dmsg.de](http://www.dmsg.de); <http://csvg-ms.net>).

It is assumed that venous outflow obstruction leads to venous stasis or to an increase in venous pressure in the brain, which then could be similar cause of chronic venous insufficiency of the leg veins to perivenous iron deposition and subsequent inflammatory response (Zamboni 2006 Zamboni 2009). This mainly ultrasound, ie by ultrasound, our findings, as well as the recently described possible

prognostic relation of means of transcranial ultrasound detected hyperechogenicity in the brain tissue (Walter 2009), are an indication that the value of Neurosonology (ultrasound) in the diagnostic status survey of MS patients is still largely unknown.

In the discussion of the CCSVI or "venous MS" should not be overlooked that cerebral venous insufficiency were discussed earlier for other neurological diseases as the cause. The thereby collected ultrasound findings are not with the findings described in the "venous MS" identical, however, showed initially similar evidence for the existence of a migraine, an illness characterized by temporary loss of memory (transient global amnesia = TGA) (Sander 2000, Chung 2009) .

In 86 percent of patients with TGA a venous valve insufficiency of Jugularisvenen described (Schreiber 2005). Venous insufficiency of the saphenous vein is not therefore present only or typically in MS, is by no means "pathognomonic" - as is often claimed erroneously. Described in the TGA study, a venous valve insufficiency can be detected even at 33 percent of the control subjects (Schreiber 2005). This raises the question of how specific these findings for the disease. In my own so far only in poster form the present investigation, we demonstrated not (Krogias 2003).

These issues should be considered in the discussion of the possible genesis of venous with MS. Certainly the most interesting findings of Zamboni and colleagues should be pursued in a rational and serious scientific work on, and initially also by other groups to be confirmed or refuted. Zamboni describes his own hypothesis as "The Big Idea" and can thus recognize in this process rather cumbersome irrationality (Zamboni 2006). He advocated implantation of venous stents for treatment of MS is known as "Liberation Treatment" and thus arouses in MS patients are unlikely to meet expectations.

In a current in the Journal of Vascular Surgery '(December 2009:50,6:1348-1358. E3) study published Zamboni staff and in 35 RRMS, 20 SPMS and 10 PPMS patients have completed treatment with balloon dilatation. The authors claim that this procedure in RRMS patients in improvement of the clinical course was conducted. A control group is not. Whether the patient while medication and if so what were, is not clear from the work.

The improvement reflects, first described against the natural course, as relapses frequently regress in RRMS. In SPMS and PPMS particular, this is not the case, thus the "Liberation treatment" has had no effect.

In our opinion the lack of scientific Zamboni et al. presented results of sound scientific methodology and are therefore worthless and even ethically questionable.

For the Medical Advisory Board of DMSG, Federal Association:

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Chief Physician Department of Neurology Bamberg

#### Literature:

Zamboni P, Galeotti R, Menegatti E, et al. Chronic venous insufficiency in patients with cerebrospinal multiple sclerosis. *J Neurol Neurosurg Psychiatry* 2009; 80:392-399

Zamboni P: The big idea: iron-dependent inflammation in venous disease and proposed parallels in multiple sclerosis. *J R Soc Med* 2006; 99:589-593

Zamboni P, Galeotti R, Menegatti E, Malagoni AM, Giancesini S, Bartolomei I, Mascoli F, Salvi F: A prospective open-label study of endovascular treatment of chronic venous insufficiency cerebrospinal. *J.Vasc.Surg.* 2009; 50: 1348-1358.e3

Walter U, Wagner S, Horoski S, Benecke R, Zettl UK. Transcranial brain sonography findings predict disease progression in multiple sclerosis. *Neurology* 2009; 73:1010-7

Sander D, Winbeck K, Etgen T, et al. Disturbance of venous flow patterns in patients with transient global amnesia. *Lancet* 2000; 356:1982-4.

Schreiber SJ, Doepp F, Klingebiel R, Valdueza JM. Internal jugular vein valve incompetence and intracranial venous anatomy in transient global amnesia. *J Neurol Neurosurg Psychiatry* 2005; 76:509-513

Chung CP, Chao AC, Hsu HY, Lin SJ, Hu HH. Decreased Jugular Venous Distensibility in Migraine. *Ultrasound Med Biol* 2009 Nov 7 (Epub ahead of print).

Krogias C, Meves S, Peters S, Schöll M Hammer, T. Postigo parameter of venous haemodynamics in healthy individuals and report of a patient with cerebral sinus thrombosis. *J Neurol* 2003; 250 (Suppl 2): II122

## Google translate gives the following translation for the update of June 2010

### German to English translation



CCSVI in multiple sclerosis more controversial

The theory of chronic venous insufficiency, cerebro (CCSVI) is checked in the world. The MSIF has released a statement, the Medical Advisory Board of the Federal Association DMSG expressed during ENS-annual meeting in Berlin.

When CCSVI is narrowed by a disturbed venous blood outflow from the brain that will ultimately lead to inflammation and damage in the central nervous system. This hypothesis was put forward by Dr. Paolo Zamboni from Ferrara, Italy, and is currently being discussed, both globally and by numerous research groups examined to possibly shed light on the relationships. However, there is increasing evidence that this theory to the development of MS is not yet true in the manner as described by Zamboni. Much is still unclear - three recent publications, we present here.

In a poster at the 62nd Annual Meeting of the American Academy of Neurology (AAN), who on 10 to 17 was held April 2010 in Toronto, Dr. Robert Zivadinov presented by the University of Buffalo its first results. He showed that about 56% of MS patients studied so far, 23% of healthy control subjects - but also showed 42% of patients with other neurological diseases corresponding features for a CCSVI. These results corresponding deviations are less common and less specific than in the original work of Dr. Zamboni.

On 11 June appeared in the journal Annals of Neurology online a paper by researchers from the Charite in Berlin in collaboration with British researchers who examined 56 MS patients and 20 healthy controls with the latest ultrasound techniques with regard to the blood flow in her neck veins. They found out here that is unique to a single patient changes in blood flow was, and none has been a narrowing of the jugular vein identified. In practice, therefore, a CCSVI not present in MS, with one exception, and should thus play no role in the pathogenesis of MS.

Original: Doepp F, Paul F, Valdueza JM, Schmierer K, Schreiber SJ: No cerebro-cervical venous congestion in patients with multiple sclerosis, Ann Neurol Epub June 11

"Venous" hypothesis can not be the sole cause of MS

In the June issue of "The neurologist" was published a work that the theory of CCSVI critically analyze and report on results of initial observations on a small number of patients in Bochum. Ten MS patients and seven control subjects who were either healthy or had other neurological diseases were included. The authors came to the conclusion that the "venous" hypothesis can explain not only the cause of MS. Only 20% of MS patients met two of the newly established international criteria for CCSVI (five, there are a whole). It is still unclear to what extent such changes affect the MS, whether they are cause or consequence of disease. Therapeutic measures, such as for example a widening of the vessels can not be justified under the current state of knowledge. Due to the possibility of dangerous complications, the authors strongly advise the implementation of this measure also costly.

Original: Krogias C, Schroder A, Wiendl H, Hohlfeld R, Gold R: "Chronic venous insufficiency cerebrospinal and multiple sclerosis; The neurologist, 81, 6:740-46

MS societies warn risks require further evaluation

The theory is called into doubt continue to be reviewed. The warning against uncontrolled therapy methods, are both physicians and MS societies around the world agree - risks and benefits of such interventions have not been adequately studied

(See also the opinion of the Medical Advisory Board of DMSG, Federal Association).

The Multiple Sclerosis International Federation (MSIF), has now published an appropriate cautionary statement.

Link to statement

[http://www.msif.org/en/news/msif\\_news/ccsvi.html](http://www.msif.org/en/news/msif_news/ccsvi.html)

The Executive Board of the Medical Advisory Board of the Federal Association DMSG noted in a press statement at the 20th Annual Meeting of the European Neurological Society in Berlin (ENS), 19 to 23/6/2010, also expressed this:

"Venous outflow obstruction is not a trigger for MS"

A currently circulating, highly controversial theory about a possible cause of MS is the Chairman Prof. Klaus V. Toyka forward with the members of the Medical Advisory Board and the management of new disease-related competence network MS of the Federal Ministry of Research, "The theory of" chronic cerebrospinal venous insufficiency "(CCSVI), which is a possible cause of MS repeatedly discussed among experts, is a theory which is at present not to prove scientifically." This theory assumes that venous outflow obstruction leads to an increase in venous pressure in the brain, which in turn could lead to iron deposits in blood vessels with inflammation. Prof. Toyka criticized that "the evidence collected ultrasound findings revealed no clear results or even contentious. Unfortunately, so far the only and methodologically strong study by Dr. Paolo Zamboni criticized too enlargement surgery (stents) to the" out affected 'cerebral veins, which in the U.S. even called for a death toll. The medical advisory board called the studies as unethical. "

Sources: The neurologist, 81, 6:740-46

"Annals of Neurology, 11 June 2010

Ann Neurol Epub June 11,

62. Annual Meeting of the American Academy of Neurology (AAN)

Editorial: DMSG Association e.V. - 24 June 2010