



Chronic cerebro-spinal venous insufficiency (CCSVI)

CCSVI, a theory on the cause of MS symptoms and perhaps MS itself, has been widely reported in the media. The theory, developed by vascular surgeon Paolo Zamboni, is that an abnormal narrowing in blood vessels that take blood from the brain causes a build up of iron. This is then able to cross the blood-brain barrier and cause inflammation and damage to cells in the central nervous system.

A small study found CCSVI occurred in 65 people with different types of MS, but not in a control group that included both healthy people and people with other neurological conditions.

The narrowing in blood vessels can be rectified with surgery, called the 'liberation procedure'. A pilot study reports that amongst 35 people with relapsing remitting MS, 50% had no relapses in the year following surgery, compared to 27% in the period before undergoing the procedure. Participants remained on disease modifying treatments during this period, which makes the impact of the surgery harder to discern.

People with progressive forms of MS showed no significant change in assessments of cognitive and motor function.

Further studies of CCSVI and MS are planned in Canada and the USA. CCSVI remains a theory that poses questions about MS and this type of surgery is not without risk. Pending further research it is premature to consider it as a treatment option.

Zamboni P, et al. Chronic cerebrospinal venous insufficiency in patients with multiple sclerosis. *Journal of Neurology, Neurosurgery & Psychiatry* 2009;80(4):392-399.

Zamboni et al. A prospective open-label study of endovascular treatment of chronic cerebrospinal venous insufficiency. *Journal of Vascular Surgery* 2009;50:1348-1358.

Two year results from the UK Multiple Sclerosis Risk-sharing Scheme

In December, the British Medical Journal (BMJ) published the two-year interim analysis of the UK Multiple Sclerosis Risk-sharing Scheme.

The Risk-sharing Scheme is the initiative that allows people with MS access to the disease modifying drugs on the NHS. It is led by the Department of Health in conjunction with the Association of British Neurologists, the MS charities, and the pharmaceutical industry.

Since launching in May 2002, the Scheme has:

- Initiated the development of a UK-wide network of over 70 MS specialist treatment centres which have improved the care and support available to all 100,000 people with MS across the UK.
- Provided around 12,000 people with relapsing remitting MS, and in some cases with secondary progressive MS, access to the drug therapy they require.
- Provided funding to increase the number of MS specialist nurses in the UK to help support all people with MS.

Boggild M, et al. Multiple sclerosis risk sharing scheme: two year results of clinical cohort study with historical comparator. *BMJ* 2009;339:b4677.

Oral MS drug research results published

In January, the New England Journal of Medicine published results of trials of fingolimod, an oral disease modifying drug for MS. A one year phase III study (called TRANSFORMS) compared fingolimod with interferon beta 1a (Avonex) and a two-year study (FREEDOMS) compared the drug with a placebo. Both showed that fingolimod had a greater impact on reducing relapse rates and FREEDOMS also indicated that the drug reduced disability progression.

Another oral drug, cladribine has also been shown to be more effective at reducing the relapse rate than placebo. Both drugs have been submitted for licensing in Europe and America. Decisions are not expected before 2011.

If licensed, these would be the first oral disease modifying drugs for MS. For more information see www.mstrust.org.uk/atoz/oral_drugs.jsp