Brain blood vessels clue to MS

More than 55% of multiple sclerosis patients have been found to have constricted blood vessels in their brains, a US study says.

The preliminary results are from the first 500 patients enrolled in a trial at the University of Buffalo.

The abnormality was found in 56.4% of MS patients and also in 22.4% of healthy controls.

The MS Society said it was intriguing but not proof that this caused MS - as one leading expert claims.

Testing theory

The New York researchers were testing a theory from Italian researcher, Dr Paolo Zamboni who claims that 90% of MS is caused by narrowed veins.

"These results are intriguing but it is important to remember that although people with MS may show evidence of chronic cerebrospinal venous insufficiency in screening studies, there's no proof as yet that this phenomenon is a cause of MS, nor that treating it would have an effect on MS"

Dr Doug Brown, MS Society

He says the restricted vessels prevent the blood from draining fast enough and injure the brain by causing a build up of iron which leads to MS.

He has already widened the blockages in a handful of patients including his wife.

MS is a long-term inflammatory condition of the central nervous system which affects the transfer of messages from the nervous system to the rest of the body.

The Buffalo team used Doppler ultrasound to scan the patients in different body postures to view the direction of venous blood flow.

The 500 MS patients, both adults and children, also underwent MRI scans of the brain to measure iron deposits in surrounding areas of the brain.

The full results will be presented at an American neurology conference in April.

There were 161 healthy controls.

'Cautious optimism'
Robert Zivadinov who led the study at the University of Buffalo, said he was "cautiously optimistic and excited" about the preliminary data.

"They show that narrowing of the extracranial veins, at the very least, is an important association in multiple sclerosis.

"We will know more when the MRI and other data collected in this study are available."

Dr Doug Brown, Biomedical Research Manager at the MS Society, said: "These results are intriguing but it is important to remember that although people with MS may show evidence of chronic cerebrospinal venous insufficiency in screening studies, there's no proof as yet that this phenomenon is a cause of MS, nor that treating it would have an effect on MS.

"The next step is to determine what this actually means for MS and an investigation into whether there's any potential therapeutic benefit from treatment will be pivotal for this novel theory."

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