

*Analysis of cervical plethysmography data in diagnosis of chronic  
cerebro-spinal veinous insufficiency*

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The presentation describes the initial mathematical and physical analysis of patient and control data from the new cervical plethysmography diagnostic technique, introduced by Professor Zamboni, in the diagnosis of CCSVI.

We show that the data produced is consistent with previous recent work which showed that the hydrodynamics of the brain is very closely approximated by a second-order system.

We show that a classical two-parameter characterisation of the second-order response curves to the Heaviside step function could be a powerful classification technique for diagnosis of CCSVI.