

Thematic Issue for RRCT

Chronic cerebrospinal venous insufficiency and its hypothetical role in the pathogenesis of multiple sclerosis

Guest Editor: Marian Simka

Multiple sclerosis is a chronic and debilitating neurological disease that is characterized by multifocal areas of inflammation, demyelination and neurodegeneration within the central nervous system. Although the currently ruling paradigm is that this disease is primarily an autoimmune disease, recent discoveries suggest that multiple sclerosis may have a venous background and may develop and/or progress as a consequence of the chronic cerebrospinal venous insufficiency, a unique venous pathology, which is comprised of stenoses and occlusions in the extracranial veins draining the central nervous system.

Our understanding of the nature of chronic cerebrospinal venous insufficiency is changing as the research on this pathology continues. Consequently, the aim of this Hot-Topic Issue of *the Reviews on Recent Clinical Trials* is to present current knowledge on this newly discovered vascular condition, looking at the problem from different perspectives: anatomical, embryological, biophysical, biochemical as well as diagnostic or therapeutic. Besides, critical reviews presenting arguments against substantial role for venous outflows from the brain and spinal cord will try to show the problem in a different light in order to interpret properly the clinical relevance of this vascular condition.

It is hoped, therefore, that this Hot-Topic Issue will be helpful in the understanding of the phenomenon of chronic cerebrospinal venous insufficiency. It will also be especially supportive in the proper design of the ongoing studies on this vascular pathology: animal and *in vitro* experiments, diagnostic studies on humans and finally - randomized clinical trials.

Suggested topic list:

Review articles on chronic cerebrospinal venous insufficiency in the context of:

- ? Anatomy
- ? Physiology
- ? Diagnostics
- ? Historical research on potential venous background of multiple sclerosis
- ? Clinical trials
- ? Articles presenting arguments against the role for chronic cerebrospinal venous insufficiency as well as backing the idea are highly welcome.

No of articles planned: 8-10 (still, also other, non-solicited reviews, especially presenting arguments against the chronic cerebrospinal venous insufficiency (CCSVI) hypothesis, will be welcomed).

List of potential authors:

- a) Editorial: Mark Haacke (USA/Canada) - arguments *pro* substantial role for CCSVI in the pathology of multiple sclerosis. nmrimaging@aol.com
- b) Editorial: (author to be established) - arguments *contra* substantial role for CCSVI in the pathology of multiple sclerosis.
- c) Franz Schelling (Austria) - review on anatomical knowledge on the links between multiple sclerosis and anatomy of intra- and extracranial veins. dr.franz.schelling@aon.at
- d) Mark Haacke (USA/Canada) - review on animal experiments backing the idea of venous background of multiple sclerosis.
- e) Maciej Zaniewski (Poland) - review on biophysics of venous outflow from the brain in the context of chronic cerebrospinal venous insufficiency hypothesis. maciej_zaniewski@wp.pl
- f) Paolo Zamboni (Italy) - topic and title to be discussed (has agreed to write a review; most likely it will be on clinical results of already performed trials on endovascular treatment for CCSVI). zambo@unife.it

- g) Marian Simka (Poland) - review on hypothetical cellular and biochemical mechanism that might be responsible for progression of multiple sclerosis in a case of chronic cerebrospinal venous insufficiency.
- h) Mark Haacke (USA/Canada) - review on current diagnosis for CCSVI utilizing magnetic resonance imaging techniques. nmrimaging@aol.com

Editorial: (author to be established) - Future perspectives of the research on chronic cerebrospinal venous insufficiency