

## INTERNATIONAL SCIENTIFIC COTERIE: VENOUS FUNCTION AND MULTIPLE SCLEROSIS

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### EMBRYOLOGY OF THE VENOUS SYSTEM AND ORIGIN OF TRUNCULAR VENOUS MALFORMATION IN THE EXTRACRANIAL VENOUS PATHWAYS

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Truncular venous malformation (VM) is an outcome of embryologically defective vessels involving the later stage of the embryogenesis.

The truncular VM lesions are further subgrouped as an obstructive or dilated lesion (e.g. internal jugular vein aneurysm; azygos vein stenosis) so that they are associated with more serious hemodynamic consequences; chronic venous congestion/hypertension either by the reflux or occlusion seems to leave more damage along the venous capacitance organ/tissue.

Cerebrospinal venous circulation can be no exception from the potential risk of long term impact of chronic venous hypertension to brain function causing various clinical conditions/illnesses (e.g. chronic cerebrospinal venous insufficiency-CCVI).

Truncular VM lesions as the potential cause for the CCVI, along the internal jugular/innominate/ superior vena cava/azygos vein system, have been raised as a precipitating factor to multiple sclerosis.

Therefore, proper understanding on the evolutionary as well as involutinal process of embryonic veins is mandated for the management of these truncular VM lesions.