LETTER TO THE EDITOR

Vascular etiology of intracranial hypertension

Dear Editor,

We would like to thank the author of the Letter to the Editor for taking the time to comment on our study. Indeed Degnan et al. recommended the MR venography for detecting cerebral venous sinus thrombosis, but in cases of pseudotumor cerebri. They wrote: "some cases of IIH (idiopathic intracranial hypertension) have identifiable etiology, such as dural venous stenosis, which has been implicated in 14%–90% of patients with IIH" [1]. Farb et al. had the objective "to determine the prevalence and nature of sinovenous obstruction in idiopathic intracranial hypertension (IIH) using MR venography" and they concluded "using MR venography, the authors can identify IIH patients with sensitivity and specificity of 93%" [2].

Idiopathic intracranial hypertension has no known etiology or has various nonspecific associated factors, therefore situations with a known etiology cannot be included in an idiopathic disease. Vascular intracranial hypertension has the following etiology: any cerebral vascular illness that causes intracranial hypertension. There are clear differences between these illnesses. Vascular ICH involves vasogenic brain edema, the critical intracranial pressure (ICP) values are lower in vascular ICH until the decompensation of ICH, the increase in ICP is faster in vascular ICH and the treatment is symptomatic, as well as etiologic and pathogenic in vascular ICH. The brain edema appears to be balanced by the intraventricular pressure in idiopathic ICH, the ICP values are higher in idiopathic ICH, there is a very slow ICP increase and a longer period until the complete clinical syndrome has developed and the treatment is only symptomatic.

About the interpretation of the results, the period from the first clinical signs until the complete clinical syndrome was only 2–3 weeks for three patients with transverse sinus stenosis included in vascular intracranial hypertension. The pressure of the CSF for these three patients before treatment was: 19 cm H₂O, 18–20 cm H₂O, and 25 cm H₂O. Also, none of these three patients had the diagnosis criteria to include them in idiopathic intracranial hypertension (Friedman and Jacobson’s diagnosis criteria) [3].

Idiopathic ICH consists of an ICH syndrome without an etiology. There are only associated factors or confounding conditions, such as metabolic and endocrine disorders, etc. In some patients with idiopathic ICH (based on the diagnosis criteria) the sinus stenosis can be an associated factor.

We believe that pseudotumor cerebri is a terminology that is outdated and it was a generic term which included both vascular ICH and idiopathic ICH. Idiopathic intracranial hypertension has no known etiology.

Vascular intracranial hypertension has a known etiology — any cerebral vascular illness that causes intracranial hypertension: cerebral venous thrombophlebitis, cerebral venous sinus thrombosis, cerebral ischemias with secondary ischemic brain edema, as in the ischemic stroke caused by the occlusion or stenosis of the big cerebral vessels, and possible extra-cerebral illnesses, such as hypertensive encephalopathy with congestive brain edematization [4].

References


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