Secondary normal pressure hydrocephalus

Secondary normal pressure hydrocephalus (NPH) does indeed exist and should be differentiated from idiopathic normal pressure hydrocephalus (iNPH) based on outcome as well as clinical, pathophysiological, and epidemiological characteristics but should not be considered as a separate entity.

Evaluation of patients with NPH to identify a known cause is recommended because the response to treatment varies considerably. Although clinical presentation is often the same, a multitude of primary etiologies can lead to the development of sNPH. The most common etiologies of sNPH include subarachnoid hemorrhage SAH, traumatic brain injury, intracranial malignancies, meningitis, and stroke. Further studies are required to investigate differences in management and outcome among the diverse etiologies of sNPH [1].

The first case of a DAVF presenting with symptoms mimicking idiopathic normal pressure hydrocephalus. After worsening of gait impairment, memory loss and urinary incontinence an urgent CT of the brain showed hydrocephalus and a hyperdense mass in the pineal region mimicking a pineal tumour; an emergent digital subtraction angiogram showed a left petrous apex Borden type III DAVF. A transvenous embolisation was performed obtaining a complete obliteration [2].

[1]

Daou B, Klinge P, Tjoumakaris S, Rosenwasser RH, Jabbour P. Revisiting secondary normal pressure hydrocephalus: does it exist? A review. Neurosurg Focus. 2016 Sep;41(3):E6. doi: 10.3171/2016.6.FOCUS16189. PubMed PMID: 27581318.

[2]

Guarrera B, Cavasin N, Rossetto M, Magrini S. Petrous apex's dural arteriovenous fistula (DAVF) mimicking a pineal region tumour: a rare cause of Hakim triad. BMJ Case Rep. 2022 Nov 24;15(11):e251342. doi: 10.1136/bcr-2022-251342. PMID: 36423936; PMCID: PMC9693661.