

# International Conference on Central Nervous System - Drug Effects & Novel Drug Development

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## Normal pressure hydrocephalus

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Normal Pressure Hydrocephalus (NPH) is a treatable cause of dementia, that is characterized from gait apraxia and urinary incontinence in addition to dementia that results in significant disability if not identified and treated. The diagnosis is established on the basis of enlarged cerebral ventricles with the triad of clinical symptoms :gait impairment, dementia, urinary incontinence. NPH usually occurs in the sixth to seventh decades of life. Accurate diagnosis and selection of patients with shunt responsive NPH is critical for a favorable outcome. The response rates to shunting varies between 31%-89%. The pathophysiology of NPH is not well understood. Impaired absorption of CSF is the suspected mechanism in most cases of secondary normal pressure hydrocephalus. There is need of a careful diagnosis through a comprehensive clinical evaluation. The diagnostic evaluation includes screening cognitive evaluation and detailed neuropsychological testing to evaluate for dementia, blood work to evaluate for other reversible causes of memory loss and structural imaging to confirm the diagnosis of hydrocephalus in the absence of significant microvascular disease or bilateral medial temporal lobe atrophy that would be of concern for a concomitant neurodegenerative process. It is very important to carefully indentify the patients likely to respond to surgical intervention. The high volume spinal tap is the simplest test that can be done as an office procedure. There are positive and negative predictors of favorable outcome after shunt placement in cases of NPH based on the clinical presentation and the response to diagnostic testing. Careful evaluation of all the clinical and diagnostic parameters can identify the cases that will likely respond to shunt placement.

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