

Amyloid beta 42

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iNPH patients are present with lower CSF [A \$\beta\$ 42](#) and [p-tau](#) concentrations than healthy individuals and lower [t-tau](#) and p-tau concentrations than AD patients. This could prove helpful for improving diagnosis, differential diagnosis, and possibly prognosis of iNPH patients ¹⁾.

Results suggest that levels of CSF A β 42, p-tau, and t-tau, in particularly decreased t-tau, are of potential value in differentiating iNPH from LBDs and also confirm previous studies reporting t-tau level is lower and A β 42 level is higher in iNPH than in AD ²⁾

During the last 20 years, an expanding body of research has elucidated the central role of amyloid precursor protein (APP) processing and amyloid beta peptide (A β) production in the risk, onset, and progression of the neurodegenerative disorder Alzheimer's disease (AD), the most common form of dementia. Ongoing research is establishing a greater level of detail for our understanding of the normal functions of APP, its proteolysis products, and the mechanisms by which this processing occurs. The importance of this processing machinery in normal cellular function, such as Notch processing, has revealed specific concerns about targeting APP processing for therapeutic purposes. Aspects of AD that are now well studied include direct and indirect genetic and other risk factors for AD, APP processing, and A β production. Emerging from these studies is the particular importance

of the long form of Abeta, Abeta42. Elevated Abeta42 levels, as well as particularly the elevation of the ratio of Abeta42 to the shorter major form Abeta40, has been identified as important in early events in the pathogenesis of AD. The specific pathological importance of Abeta42 has drawn attention to seeking drugs that will selectively lower the levels of this peptide through reduced production or increased clearance while allowing normal protein processing to remain substantially intact. An increasing variety of compounds that modulate APP processing to reduce Abeta levels are being identified, some with Abeta42 selectivity. Such compounds are now reaching clinical evaluation to determine how they may be of benefit in the treatment of AD ³⁾.

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Pyrgelis ES, Boufidou F, Constantinides VC, Papaioannou M, Papageorgiou SG, Stefanis L, Paraskevas GP, Kapaki E. Cerebrospinal Fluid Biomarkers in iNPH: A Narrative Review. *Diagnostics (Basel)*. 2022 Nov 28;12(12):2976. doi: 10.3390/diagnostics12122976. PMID: 36552981; PMCID: PMC9777226.

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Said HM, Kaya D, Yavuz I, Dost FS, Altun ZS, Isik AT. A Comparison of Cerebrospinal Fluid Beta-Amyloid and Tau in Idiopathic Normal Pressure Hydrocephalus and Neurodegenerative Dementias. *Clin Interv Aging*. 2022 Apr 11;17:467-477. doi: 10.2147/CIA.S360736. PMID: 35431542; PMCID: PMC9012339.

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Findeis MA. The role of amyloid beta peptide 42 in Alzheimer's disease. *Pharmacol Ther*. 2007 Nov;116(2):266-86. doi: 10.1016/j.pharmthera.2007.06.006. Epub 2007 Jul 17. PMID: 17716740.

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