## Mini mental state examination for hydrocephalus

Matsuoka et al., analyzed their Mini Mental State Examination (MMSE), Frontal Assessment Battery (FAB), and Trail Making Test (TMT) scores on tests conducted before and 1 day and 1 week after the Cerebrospinal fluid tap test (CSFTT).

Changes in MMSE scores were negligible 1 day after the CSFTT but began to appear 1 week later. Changes in FAB scores were observed from 1 day to 1 week after the CSFTT. Although no statistically significant differences in TMT scores were observed at either time point, the execution time for the test tended to be shorter on the day after the CSFTT. Changes in cognitive function were not associated with demographic or morphological parameters. More severe impairments at baseline, however, were associated with greater changes in cognitive function.

Performing several reevaluations using each test may enable more accurate assessment of cognitive function in patients with suspected iNPH. The results highlight the need for long-term follow-up, regardless of the severity of cognitive impairment <sup>1)</sup>.

A significant difference between normal pressure hydrocephalus (NPH) and controls in the change between baseline and 1 day after spinal tap was only observed in MMSE. In the domains of visuoconstructive function and attention, controls performed slightly better at day one compared to baseline, which could be interpreted as a learning effect, but after adjusting for multiple testing none of the P values were significant. In contrast to other reports, the MMSE seems to provide a sensitive evaluation of the response to spinal tap in NPH patients and might therefore be included into the routine work up of NPH patients. All other neuropsychological (NPSY) tests showed less prominent changes within 1 day after spinal tap <sup>2</sup>.

## References

## 1)

Matsuoka T, Akakabe M, Iida JI, Kawahara M, Uchiyama Y. Changes in Cognitive Function Scores After Cerebrospinal Fluid Tap Testing in Patients with Suspected Idiopathic Normal-Pressure Hydrocephalus. Cogn Behav Neurol. 2018 Dec;31(4):201-206. doi: 10.1097/WNN.0000000000000176. PubMed PMID: 30562229.

Schmidt H, Elster J, Eckert I, Wiefek J, Paulus W, von Steinbuechel N, Abatih EN, Blocher J. Cognitive functions after spinal tap in patients with normal pressure hydrocephalus. J Neurol. 2014 Sep 20. [Epub ahead of print] PubMed PMID: 25239390.

From: https://neurosurgerywiki.com/wiki/ - Neurosurgery Wiki

Permanent link: https://neurosurgerywiki.com/wiki/doku.php?id=mini\_mental\_state\_examination\_for\_hydrocephalu

Last update: 2024/06/07 02:52

