Jae-Hyun Cho, J Neurol Neurophysiol 2017, 8:3 (Suppl)
http://dx.doi.org/10.4172/2155-9562-C1-050

The influence of serum lipid on memory function

Jae-Hyun Cho
Pusan National University Hospital, South Korea

Statement of the Problem: Mild cognitive impairment is becoming more common in elderly population. The population aged 85 or older has significant cognitive impairment in 25%. There are many diseases that occur along with cognitive impairment, for example Alzheimer's disease, dementia and cognitive function, which are affected by various causes. Progressive memory loss indicates mild cognitive impairment and more than half of patients develop dementia within 5 years. But we cannot detect the disease before it produces evident functional defect like memory loss. So we investigate the relation between general laboratory test and Rey-Kim memory test. Commonly, Mini-Mental State Examination (MMES) is used to test cognitive function. But, in this study, we used Rey-Kim memory test, the first adapted and standardized memory test in Korea, because, it is more suitable tool than MMSE to test normal people.

Methodology & Theoretical Orientation: Participants were checked for laboratory tests and memory function test. We checked for laboratory tests such as CBC, LRFT, lipid profile, GGT, CK, electrolyte, free fatty acid (FFA), insulin, glucose, HBsAg/Ab, anti-HCV and urinary test. And we used "Rey-Kim Memory Test" to estimate memory function. It consists of two subtests, K-AVLT (K-Auditory Verbal learning Test) and K-CFT (K-Complex Figure Test). There are 5 indices of 'Learning Curve (LC)', 'Memory Retention (MR)', 'Retrieval Efficiency (RE)', Drawing/Memory consistency (DM) and Memory Quotient (MQ). We conducted correlation analysis between these indices and the result of laboratory tests.

Findings: We found that memory function was associated with serum lipid level. Accordingly, higher LDL correlated with lower RE, MR and DM, but not with LC and MQ (Table 1). And TC had negative correlation with RE and MR. (Table 2) No significant correlations were found between HDL, TG, FFA and memory function (all $p>0.05$).

Conclusion & Significance: Our findings suggest that high serum LDL and TC could contribute to lowering in memory function partly. So cholesterol control may be the most important for cognitive health.

Biography

Jae-Hyun Cho was Graduated from Department of Korean Medicine, Wonkwang University, South Korea and received degree of K.M.D in 2014. In 2015, he Completed internship in Pusan National University Korean medicine Hospital and in 2017 he Completed his master's degree in Korean medicine. During 2015-2017 he received residency training specialization in Korean Internal medicine (cardiology and neurology) in Pusan National University Korean medicine Hospital

chojh804@hanmail.net

Notes: