P1-02.

Neuroimaging in patients with Alztheimer disease with Frailty

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(社会人大学院博士課程3年高齢総合医学)
○廣瀬 大輔
(高齢診療科)
小川 裕介、金子 義嗣、竹野下尚仁
波岡那由太、深澤 雷太、佐藤 友彦
平尾健太郎、清水聰一郎、金高 秀和
馬原 孝彦、櫻井 博文、羽生 春夫
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Background/Aim : Frailty represents a major risk factor for negative health-related events in the elderly. However, There is not a certain view to the influence of neurological pathological changes on frailty. The aim of this study is to identify the characteristics of neuroimaging in Alzheimer disease (AD) patient with frailty.

Methods : A total of 192 outpatients with AD (male : 92, female : 100, age : 80.6 ± 6.4 years) who underwent both magnetic resonance imaging (MRI) and singlephoton emission tomography (SPECT) were enrolled in this study. Frailty was determined according to the Obu Study Health Promotion for the Elderly (OSHPE). We compared the severity of chronic small vessel ischemia (DWMH; deep white matter, PVH; periventricular white matter), number of lacuna infarction and atrophy of medial temporal lobe between AD with and without frailty by using MRI. We investigated characteristic cerebral blood flow (CBF) pattern of AD with frailty by using SPECT.

Results : Prevalence of frailty was 43.2% in patients with AD. PVH and WMH were significantly severe (p<0.001) in AD patients with frailty. AD without frailty showed CBF decrease in the parietal lobe and typical AD CBF pattern.

Conclusion : AD with frailty had severe chronic small vessel ischemia.

P1-03.

Influence of trait anxiety, childhood abuse, and adulthood life events on depressive symptoms

(社会人大学院博士課程3年精神医学、医療法人社団成仁成仁病院)
 ○内田 由寛
 (メンタルヘルス科)
 高江洲義和、市来 真彦、高橋 寿直
 片山 成仁、井上 猛
 (医療法人社団成仁 成仁病院)
 高橋 寿直、片山 成仁

[Background] Recent studies have shown that depression is caused by the interaction of multiple factors such as heredity, personality traits, childhood abuse and parenting, and adulthood stressful life events. We have studied complicated interrelationship of multiple factors by incorporating the analytical concepts of "moderator effect" and "mediator effect". We have reported that affective temperaments play as both a moderator and a mediator for the effect of childhood abuse on adult depressive symptoms (Nakai et al.). In this study, we hypothesized that trait anxiety is a mediator factor in the influence of childhood abuse on adulthood depressive symptoms and evaluation of adulthood life events. We verified the interaction between these four factors by covariance structure analysis.

[Methods] We conducted a survey on selfadministered questionnaires for a total of 404 participants from the nonclinical general adult population agreeing after the written explanation. We used four questionnaires : depression symptoms (PHQ-9), trait anxiety (STAI-Y), childhood abuse (CATS), evaluation of positive or negative life events (LES).

We designed a structural equation model. The covariance structure analysis robust maximum likelihood estimation of this model was performed by Mplus version 7.3 (Muthén & Muthén, CA, USA).

[Results**]** The goodness of fit of the structural equation model was good. We revealed that childhood abuse increased depressive symptoms in adulthood and the negative evaluation of adult life events through increased trait anxiety. Furthermore, trait anxiety affected depression symptoms in adulthood through the influence