

Symposium | Trauma : [Symposium 48] Dialogue in PTSD: clinical support and basic science

📅 2025年9月26日(金) 16:30 ~ 18:00 🏢 Session Room 2 (Main Hall B)

## [Symposium 48] Dialogue in PTSD: clinical support and basic science

Moderator: Yoshiharu Kim (National Center of Neurology and Psychiatry), Daniel Shuen Sheng Fung (Institute of Mental Health)

### [SY-48-04] A longitudinal study of the association of blood unsaturated fatty acids with posttraumatic stress disorder (PTSD)

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キーワード : PTSD、unsaturated fatty acids、linoleic acid、omega-6

There are no established prevention methods for PTSD, and there is a need for treatment and prevention methods for PTSD. The phospholipid hypothesis, which proposes a correlation between the fatty acid composition of membrane phospholipids and neuropsychiatric function, has been proposed, and relationships between blood unsaturated fatty acids and clinical symptoms of psychiatric disorders have been reported. It is presumed that there is a certain relationship between anxiety, including PTSD, and unsaturated fatty acids, and that adjusting the amount of unsaturated fatty acids in some way can suppress the onset of PTSD. We analyzed the association between blood fatty acid fractions and posttraumatic stress disorder (PTSD) symptoms at 1 month and 3 months after injury in patients admitted to the emergency department due to physical trauma, with the aim of investigating the association between blood fatty acid fractions and PTSD symptoms in people who experienced physical trauma. Blood samples were taken on admission, and PTSD symptoms were assessed using a questionnaire at one and three months after the injury. Multiple regression analysis showed that linoleic acid and total omega-6 were significantly associated with PTSD symptoms at both 1 and 3 months. Our study suggests that there may be a relationship between blood fatty acid fractions and the development of PTSD symptoms in individuals who have experienced physical trauma. A detailed examination of blood fatty acid fractions and PTSD symptoms may lead to the prevention of subsequent progression to PTSD by regulating blood fatty acids through diet in various patients transported to emergency rooms and victims of disasters. To date, there is no preventive method for PTSD, and we hope that the study of blood fatty acids will help develop a preventive method that can be easily and effectively implemented for a large number of subjects.