

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-48-01] Clinical and molecular perspective of PTSD treatment: from the viewpoint of fear extinction**\*Yoshiharu Kim<sup>1</sup> (1. National Center of Neurology and Psychiatry (Japan))

キーワード : PTSD、memantine、exposure therapy、fear extinction

PTSD is a mental disorder that causes destructive and long-term suffering in individuals who were previously healthy. It is estimated that there are 700,000 patients in Japan, but many patients prioritize legal and social assistance and delay seeking medical care due to fear of stigma, with only approximately 7,000 to 15,000 receiving mental health care. Effective treatment is essential for raising social awareness and supporting these individuals. Currently in Japan, sertraline, paroxetine, and prolonged exposure therapy are covered by insurance. Drug therapy is simple but their effect size is less than 0.4. The speaker invited Edna Foa to Japan in 2002 and has been working to promote prolonged exposure therapy since then. This treatment has high effect size, usually greater than 1.5, but can be used for only a small number of patients. Therefore, there is a need to develop a treatment that is both simple and highly effective. Research using rodents on fear memory has provided various useful insights into extinction learning. Exposure therapy is also a type of extinction learning. Based on the results of basic research indicating that memantine is effective for extinction learning, we administered it to 10 human PTSD patients and demonstrated improvement in an open trial. The effect size before and after treatment was 1.35, significantly exceeding the effect sizes of many pharmacological treatments in psychiatry. Memantine is an antagonist at the NMDA receptor and is used in clinical practice as a cognitive enhancer. The effect of memantine in humans may be due to its promotion of learning functions, which facilitates extinction learning. The fact that exposure therapy, which promotes extinction learning, and memantine are effective in PTSD treatment suggests that the core of PTSD lies in a disorder of extinction learning of fear memories.