

精神疾患に対する脳神経外科的治療

— 日本での臨床試験実施が直面する課題 —

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Neurosurgical treatment for mental disorders — Critical issues for considering clinical trial in Japan —

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Abstract

In this article, I would like to consider appropriateness of neurosurgical treatment (deep brain stimulation : DBS) for mental disorders. At first, we must recognize the historical background of DBS related to 'psychosurgery'. In Japan, there was a fierce political movement against leading authorities in psychiatry in 1970's, and this movement took psychosurgery as a symbol of evil of the ancient regime. Due to this movement, brain surgery for psychiatric case was banned and sealed under taboo. Therefore, applying DBS for mental disorders is a more sensitive problem in Japan than in other countries.

Reflecting on this history, I find three problems confronting clinical trials of DBS for obsessive-compulsive disorder (OCD) now planned in Japan. First, DBS for OCD is a last resort for a refractory case after conventional treatment. However, cognitive-behavioral therapy for OCD is not yet well established in Japan. So in considering clinical trial of DBS, it is necessary to first show sufficient clinical outcome of cognitive-behavioral therapy in Japan.

Second, it should be considered how to care for non-respondent patients in a DBS trial. This task requires reexamination of the trial protocol based on the past experience abroad and consideration of reimplantation or an alternative method, e.g. ablative surgery which has been neglected for almost 40 years in Japan.

Third, as the number of DBS for OCD cases is to be very small, it is difficult to conduct a clinical trial under law by a commercial sponsor. So, it is planned to be carried out by a single university's equipment without legal basis. Under such a situation, there should be organized support and supervision by a third party under the Society of Neurosurgery and of Psychiatry, in order to evaluate DBS as a part of the treatment of mental disorders.

Key words

deep brain stimulation (DBS), obsessive-compulsive disorder (OCD), psychosurgery

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