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Research Activities

Psychopathology, psychotherapy and child study group

We have performed research in psychotherapy, psychopathology, and child psychiatry. We have investigated the care systems for developmental disorders in the psychiatry unit. We began a study of the attention problems of patients with developmental disorders or psychotic disorders. This study investigated the quality of attention in autism-spectrum disorders, but when many tasks were added, the quality of attention tended to decrease. In psychotherapy, we attempted to develop prototypes of dialectical behavior therapy for Japanese patients, diary therapy, and the self-psychological psychotherapeutic approach, which maintains the self-esteem of patients with developmental disorders and develops cognitive functions. We have been investigating the possibility of a psychoanalytic approach for development disorders.

Our social psychiatry team investigated background factors related to depression in white-collar workers. This study suggested that male workers exhibiting perfectionism tend to undertake too much work and to become exhausted when trying to cope with complex human relationships in the workplace. Female workers having the double burden of family commitment and perfectionism tended to be isolated in terms of personal relationships, leading to exhaustion both inside and outside the workplace.

Morita therapy group

In cooperation with psychotherapists of other schools, such as cognitive-behavioral therapy and psychoanalysis, we are developing programs and materials to train young psychiatrists in the basic techniques of the clinical interview. We have been continuously promoting comparative studies between Morita therapy and “the third generation of cognitive-behavioral therapies.” Recently, we started practical research towards the application of Morita therapy to the field of palliative medicine. In addition, studies continuing this year examined the subtypes of obsessive-compulsive disorder, the psychopathology of social anxiety disorders, and factors in the recovery of patients with depression through inpatient Morita therapy.

Psychopharmacology group

In basic research, we performed the following studies in rodents: 1) effect of a novel psychotropic agent on monoamine neurotransmission using microdialysis and radioimmuno-

assay techniques, 2) the formation mechanism of drug addiction, 3) the neural basis of addiction-related impulsivity, and 4) the development of a novel anticraving agent (the latter 3 studies were performed in collaboration with the NTT Communication Science Laboratories and the Department of Psychology, Senshu University). In clinical research, we have performed the following studies in humans: 1) the effect of second-generation antipsychotics on anxiety and stress-related disorders, 2) the effect of antipsychotics on dopaminergic neurotransmission using positron emission tomography (in collaboration with the National Institute of Radiological Sciences), 3) exploratory research on novel blood biomarkers for mood disorders (in collaboration with the Department of Virology, The Jikei University School of Medicine), and 4) the effect of modified electroconvulsive therapy on regulatory factors for gene expression, and 5) the symptoms of menstruation-related mental disorders, atypical psychosis, and acute psychosis. Integration between basic and clinical research is a fundamental concept of the Psychopharmacology group.

Psychophysiology group

Our studies included: 1) a study of changes in sleep structures and cognitive function with the menstrual cycle by means of the cyclic alternating pattern method, 2) empirical research regarding the efficacy of group cognitive behavioral therapy for primary insomnia and depression, 3) clinical research with the multiple sleep latency test of hypersomnias of central origin, and 4) an investigation of biomarkers of fatigue for obstructive sleep apnea syndrome.

Psychogeriatric group

We are performing several studies investigating the neural basis of neuropsychiatric symptoms and social function in patients with neurodegenerative disorders and other psychiatric disorders among elderly persons using neuropsychological evaluation and neuroimaging methods, such as brain magnetic resonance imaging and single-photon emission computed tomography. One study revealed that anxiety in Alzheimer's disease was correlated with hyperperfusion in the bilateral anterior cingulate cortices and a reduction in the gray matter volume in the right precuneus and inferior parietal lobule. Another study revealed that attention deficits, executive dysfunction, and working memory are observed in patients with late-life somatization disorders. The finding that attention deficits are not correlated with the severity of symptoms suggests that attention deficits are associated with the appearance of symptoms. Executive dysfunction and working memory might be associated with the severity of symptoms. We are planning to investigate further effects of these symptoms on the daily lives of patients and the burden on caregivers.

General hospital psychiatry

In a study of interventional therapy based on cognitive-behavioral therapy aimed at preventing recurrences of depression, a computer system and sleep evaluation methods were introduced in addition to a previous evaluation system for more effective presentations and for more precise estimation, respectively. Furthermore, an investigation of new indications for this intervention for atypical depression, bipolar depression, and insomnia

was performed. Another study investigated the issues associated with mental care services for patients with cancer. We are now focusing on risk factors for postoperative delirium in patients with digestive tract cancers.

Clinical electroencephalography group

We reported a case of epilepsy that was induced by a specific situation and showed a peculiar clinical course. Furthermore, we examined the serum concentrations of new antiepileptic drugs during the pregnancy of patients with epilepsy. A study was performed to prevent the recurrence of depression in patients with epilepsy. We are planning a study of the management of epilepsy in pregnant women.

Clinical psychology group

We have continued to discuss and study psychotherapeutic processes and the treatment techniques of cognitive behavior therapy, Morita therapy, relief care, psycho-oncology, and social skill training. We have also examined the characteristics of developmental disorders and higher brain dysfunctions through psychological assessments. We invited Mr. Tsunemoto Suzuki to a clinical conference and studied “autogenic training” and its clinical use. Furthermore, we trained graduate students of a clinical psychological course.

Publications

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