

Department of Psychiatry

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General Summary

Our research activities cover a wide range of topics: disorders at the psychologic and biologic levels, from childhood and adolescence, through adulthood, to the senile period. Sociologic, psychologic, physiologic, and biochemical methods were used.

Research Activities

Psychopathology, psychotherapy, and child study group

Studies examined the care systems for developmental disorders in the psychiatry unit and the difference between “attention deficit” observed in developmental disorders and that observed in other mental disorders. A new counseling method, the Self-Psychological Psychotherapeutic Approach, developed to improve and maintain self-esteem in patients with developmental disorders, was studied, and a clinical trial of it has already been started. A study of basic factors in depression in white-collar workers found close relationships between depression and personal characteristics, feelings of self-esteem, and psychological stress experienced outside, rather than inside, the workplace.

Morita Therapy group

“Guidelines for Outpatient Morita Therapy” was translated into Chinese. Studies continued this year included those on such topics as the relationship between panic disorder and generalized anxiety disorder, the subtypes of obsessive-compulsive disorder, a “fall-in reaction” occurring in the process of mood or anxiety disorders, and the factors in the recovery of inpatients receiving Morita therapy for depression. A qualitative study of the life histories of female patients with obsessive-compulsive disorder has been performed. In addition, comparative studies between Morita Therapy and third-generation cognitive-behavioral therapies, such as acceptance and commitment therapy, were started.

Psychopharmacology group

In basic research, 1) the mechanism of central action of a new generation of psychotropic drugs was studied with microdialysis and radioimmunoassay, and 2) brain mechanisms underlying drug dependence and the development of a new drug for drug dependence were studied in rats (in collaboration with the Japan Science and Technology Agency). In clinical research, studies examined: 1) the effectiveness and adverse effects

of new psychotropic drugs, 2) the involvement of the medial prefrontal cortex in motivation-oriented behavior (functional magnetic resonance imaging study in collaboration with the National Institute of Radiological Science); 3) nerve growth factors involved in neurodegenerative diseases (genetic research in collaboration with the Institute of DNA Medicine); and 4) the genetics of akathisia induced by antipsychotic agents.

Psychophysiology group

Studies included: 1) research on changes in sleep structures and cognitive function by the menstrual cycle in females using the cyclic alternating pattern method, 2) multi-institutional joint research regarding the development of a novel platform on a website for sleep medicine and research, 3) the development of skills for the diagnosis and treatment of insomnia, 4) empirical research regarding the efficacy of group cognitive behavioral therapy for insomnia on chronic sleep disturbance and depression, and 5) clinical research using the multiple sleep latency for hypersomnias of central origin

Psychogeriatric group

First, a study of the neuropsychological evaluation of neurodegenerative disorders using brain imaging modalities, such as magnetic resonance imaging and single-photon emission computed tomography, suggested that a reduction in hippocampal volume in Alzheimer's disease is related to delayed responses on neuropsychological tasks. Second, an epidemiological survey conducted in Itoigawa City showed no differences in the mortality rates of patients with dementia, although patients with vascular dementia incurred higher costs under the Long-Term Care insurance system than did patients with Alzheimer's disease.

Third, a longitudinal study of the prevalence of psychiatric disorders in patients with breast cancer was performed in collaboration with the Department of Surgery.

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, their families, and medical staff.

Clinical electroencephalography group

Studies examined: 1) adverse properties of psychotropic drugs to reduce seizure threshold and provoke seizures, which might result in several forms of psychosis in patients with epilepsy; and, 2) a prevention study of recurrent depression in epilepsy. Furthermore, we reported on a patient with epilepsy and ring chromosome 20 syndrome and an adult patient with epilepsy and ictal apnea during sleep.

Clinical psychology group

Studies examined: 1) psychotherapeutic processes and the techniques of cognitive behavior therapy, Morita Therapy, relief care, and psycho-oncology and psychiatric care during natural disasters; and 2) the characteristics of developmental disorders and higher brain dysfunctions using psychological assessments. Furthermore, we taught graduate students and engaged in the training of residents.

Publications

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