

A PROSPECTIVE COMPARATIVE STUDY OF RISPERIDONE LONG-ACTING INJECTION FOR TREATMENT-RESISTANT SCHIZOPHRENIA WITH DOPAMINE SUPERSENSITIVITY PSYCHOSIS

H. Kimura¹, N. Kanahara¹, N. Komatsu², M. Ishige³, K. Muneoka⁴, M. Yoshimura⁵, H. Yamanaka⁶, T. Suzuki⁷, H. Komatsu⁸, Y. Sekine⁹, H. Watanabe¹⁰, M. Iyo¹

¹Department of Psychiatry, Chiba University, ²Department of Psychiatry, Dowa-Kai Chiba Hospital, ³Department of Psychiatry, Satsuki-Kai Sodegaura-Satsukidai Hospital, ⁴Department of Psychiatry, Gakuju-Kai Kimura Hospital, ⁵Department of Psychiatry, Dojin-Kai Kisaradzu Hospital, ⁶Department of Psychiatry, Chiba Psychiatric Medical Center, Chiba, ⁷Department of Psychiatry, Koutoku-Kai Sato Hospital, Yamagata, ⁸Department of Psychiatry, Choshi-Kokora Clinic, ⁹Division of Medical Treatment and Rehabilitation, Chiba University, ¹⁰Department of Psychiatry, Asahi General Hospital, Chiba, Japan

Backgrounds: Although treatment-resistant schizophrenia (TRS) is a highly heterogeneous disorder, an established and efficacious treatment for those patients to date is pharmacotherapy with clozapine. Dopamine supersensitivity psychosis (DSP) is characterized by profound unstable positive symptoms and tardive dyskinesia, and its mechanism is related to up-regulation of dopamine D2 receptors (DRD2) which can be induced by long-term treatment with antipsychotics. Patients with DSP take generally excessive high dosages of neuroleptics and thus meet easily the criteria of TRS. A drug with secure and stable pharmacokinetic, which can keep an appropriate blockade of DRD2, may contribute to amelioration and prevention of the dopamine supersensitivity state. Risperidone long-acting injection (RLAI) is a candidate agent which meets this hypothesis.

Methods: For 115 patients with TRS, we divided them into two groups; the one is those with a history of DSP and the other is without DSP, and treatment with RLAI was conducted for 12-month duration. This is an observational study which did not control concomitant medications or dosage of RLAI.

Results: Clinical symptomatology and medications at baseline did not differ between the two groups. The results from the final analysis for remaining 95 patients revealed that the group with DSP showed greater improvements in the change of BPRS total score than the group without DSP.

Conclusions: These results suggested strongly that the dopamine supersensitivity state could be related partly with the etiology of TRS. An atypical agent with long half-life time such as RLAI, can provide beneficial effect for patients with DSP.