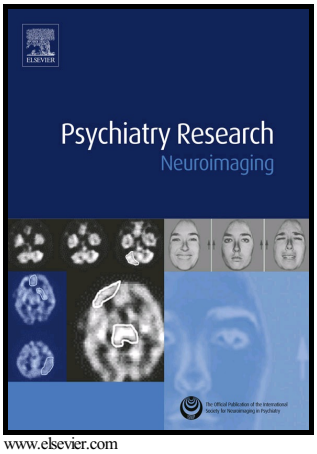

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Striatal Neurometabolite Levels in Patients with Schizophrenia Undergoing Long-Term Antipsychotic Treatment: A Proton Magnetic Resonance Spectroscopy and Reliability Study

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Abstract

Previous proton magnetic resonance spectroscopy (^{1}H-MRS) studies have reported disrupted levels of various neurometabolites in patients with schizophrenia. An area of particular interest within this patient population is the striatum, which is highly implicated in the pathophysiology of schizophrenia. The present study examined neurometabolite levels in the striatum of 12 patients with schizophrenia receiving antipsychotic treatment for at least 1 year and 11 healthy controls using 3-Tesla ^{1}H-MRS (PRESS, TE=35ms). Glutamate, glutamate+glutamine (Glx), myo-inositol, choline, N-acetylaspartate, and creatine levels were estimated using LCModel, and corrected for fraction of cerebrospinal fluid in the ^{1}H-MRS voxel. Striatal neurometabolite levels