

Effects of 5HT_{2c} blockade of dibenzodiazepines on thyroid levels in patients with schizophrenia or schizoaffective disorder

G.S. Shankar

Western University of Health Sciences, USA

Drug-induced hypothyroidism has been often observed with the use of lithium in patients with mental disorders. However, atypical antipsychotic medications especially those with serotonin 2c (5HT_{2c}) blockade like dibenzodiazepines have not been examined for their association with the occurrence of subclinical hypothyroidism. Atypical antipsychotic medications are commonly used in patients with psychiatric disorders, specifically in schizophrenia and schizoaffective disorders. The objective of this retrospective case analysis is to examine the thyroid function of patients with schizophrenia or schizoaffective disorder receiving dibenzodiazepines. This study includes patients that are on one or more of these atypical anti-psychotic agents: clozapine, olanzapine, quetiapine. Clinical outcome measured includes the effect on dibenzodiazepines on thyroid function (e.g. TSH, Free T₄, and T₄).

A total of 42 charts of the patients were included in the study. Out of the 42 patients, 13 had normal thyroid labs, 11 had abnormal thyroid labs, and 18 patients had a diagnosis of hypothyroidism and currently on a thyroid medication. Therefore, 31% of these patients were found to have normal thyroid levels while 69% of these patients were found to have either slightly abnormal thyroid indices (subclinical hypothyroidism) or an impairment of thyroid function

The results of our study show that in patients with schizophrenia or schizoaffective disorder that are on clozapine, olanzapine, risperidone, quetiapine, or any combination of the four, a higher percentage of them exhibited abnormal thyroid function with subclinical hypothyroidism or on thyroid supplements. Future studies may be warranted to further evaluate the effect of antipsychotics with 5HT_{2c} blockade on thyroid function.

Biography

G.S. Shankar received his Pharm.D. from Creighton University, Omaha, Nebraska and also holds a MS degree in Public Health from the University of North Carolina and a MS degree in clinical psychology from CSU. He is Board Certified in psychiatric pharmacotherapy and is Certified as a Pharmacist Clinician (PhC) by the New Mexico Board of Pharmacy. He is a "Fellow of the Australian College of Pharmacy Practice". Before coming to Western University College of Pharmacy, he worked several years as treatment review consultant and Clinical Pharmacist with the California Department of Mental Health and has been a member of the statewide psychopharmacology advisory committee during that period. His research and publications have been primarily on metabolic complications of psychiatric pharmacotherapy.

GShankar@westernu.edu