



ECG Abnormalities in Patients on Psychotropics Medications: A Prospective Observational Study

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Abstract

Objectives: Patients with mental illness are at an increased risk of cardiovascular changes, which can lead to mortality, and the use of psychotropic medications can exacerbate these risks. Various types of psychotropic drugs can have anticholinergic and antimuscarinic effects, leading to sinus tachycardia, while SSRIs may cause mild bradycardia. Tricyclic antidepressants can prolong the QRS interval and cause conduction defects, which is especially harmful for those with preexisting cardiac conduction delay and can lead to heart block.

The purpose of this study was to investigate the diverse ECG changes among outpatients who had been taking psychotropic medications for over a year and their association with other variables.

Material and Methods: A prospective observational study with patients on psychotropics for more than one-year was conducted in a tertiary care hospital.

Results: 125 psychiatric patients of which 53.60% (n = 67) were males and 46.40% (n = 58) were females. It was observed that out of 65 participants on antipsychotics 15.38% had abnormal ECG (Electrocardiogram) whereas among 60 participants on antidepressants 13.33% showed abnormal ECG. It was also seen that of 120 patients on benzodiazepine, 16.67% had ECG changes. Patients on psychotropics other than the above mentioned were 63 in number and constituted 20.63% of abnormal ECG changes.

Conclusion: ECG changes were observed in 15% to 20% of the patients who were started on psychiatric medicines. The changes were more among participants on antipsychotics (19.1%) followed by benzodiazepines (15.4%).

Keywords: ECG; Psychotropic; Antipsychotics; Medication; Cardiac Manifestation; Side Effects