

Studying Heart Arrhythmias in Relation to Psychosis (SHARP). Increased Prevalence of ECG Suspect for Brugada Syndrome in Recent Onset Schizophrenia.

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Introduction: Schizophrenia is associated with an increased risk of sudden cardiac death, traditionally attributed to prolonged QTc interval and cardiovascular risk factors such as metabolic syndrome. However, defective ion channels are also implicated in schizophrenia. This applies as well for Brugada syndrome (BrS), a rare hereditary cardiac disorder associated with an increased risk of cardiac arrhythmias, which can be provoked by various drugs, including psychotropic.

Objectives: To screen whether an increased prevalence of suspect Brugada ECG is present in patients with recent onset schizophrenia.

Methods: 273 subjects with recent onset schizophrenia admitted between 2006 and 2012 and 306 healthy controls, underwent an ECG. All persons who had an ECG suspect for BrS were asked to undergo a provocation test to diagnose/exclude BrS. We checked whether patients had deceased during follow-up.

Results: 20/273 patients (7.3%) and 5/306 healthy controls (1.6%) showed an ECG suspect for BrS, with a Relative risk (RR) of 4.8 ($p < 0.001$). Thus far 12 provocation tests have been performed, confirming BrS in three patients (1.1%). Ten patients had deceased during follow-up, of which two due to sudden cardiac death. Patients and controls didn't differ significantly on average QTc interval.

Conclusion: This study shows that a considerable subset of patients with recent onset schizophrenia have an ECG suspect of Brugada Syndrome, confirming results in a population with chronic schizophrenia (Blom 2014). This may imply that there is a common pathophysiologic mechanism involved in both disorders. Screening for Brugada Syndrome in schizophrenia is relevant to prevent sudden cardiac death.