

# Cardiac Effects of Psychotropic Drugs

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## Abstract

**Introduction:** *The incidence of mortality is higher among psychiatric patients than among the general population and the cause of which may be the psychiatric disorder itself or other related factors like life-style and medications. Sudden death has been associated with certain psychotropic drugs and the underlying cause(s) have been suggested to be some adverse cardiac complications. We reviewed the literature for the cardiac effects attributed to psychotropic drugs. **Methods:** A Medline and manual search of the literature on the cardiac effects attributed to the psychotropic drugs was performed. We limited ourselves to the main psychotropic drugs (antipsychotics, antidepressants, mood stabilisers, and benzodiazepines) that are available in Singapore. **Results:** The search showed that certain drugs carry a greater potential for adverse cardiac complications. Among the antipsychotics, thioridazine has a greater risk for cardiac events. The tricyclic antidepressants also have significant effect on the heart rate, blood pressure as well as having the propensity to cause prolonged QTc, whereas the selective serotonin reuptake inhibitors (SSRIs) are generally safe. Among the mood stabilisers, lithium and carbamazepine have been associated with sinus node arrhythmias while sodium valproate is relatively free of any untoward cardiac effect. The benzodiazepines are in general safe even in patients with myocardial infarction and coronary bypass. **Conclusions:** In patients with higher risk of cardiac complications (elderly, pre-existing cardiac disorders, concurrent medications with potential cardiac effects and poor metabolisers), the choice of psychotropic drugs where indicated has to be considered with these factors in mind as well as the inherent risk of these psychotropic drugs. Monitoring of the blood pressure, heart rate and ECG should be done regularly.*

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**Key words:** *Antidepressants, Arrhythmias, Hypotension, Mood stabilisers, Myocardial infarction, Psychotropic drugs, QTc interval*

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