Cardioversion of recent-onset atrial fibrillation using intravenous antiarrhythmics

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Abstract

ABSTRACT (195 words) Pharmacological cardioversion using intravenous antiarrhythmic agents is commonly indicated in symptomatic patients with recent-onset atrial fibrillation (AF). Except in hemodynamically unstable patients who require emergency direct current electrical cardioversion, for the majority of hemodynamically stable patients, pharmacological cardioversion represents a valid option and requires the clinician to be familiar with the properties and use of antiarrhythmic agents. The main characteristics of selected intravenous antiarrhythmic agents for conversion of recent-onset AF, the reported success rates and possible adverse events are discussed. Among intravenous antiarrhythmics, flecainide, propafenone, amiodarone, sotalol, dofetilide, ibutilide and vernakalant are commonly used. Antazoline, an old antihistaminic agent with antiarrhythmic properties was also reported to give encouraging results. Intravenous flecainide and propafenone are the only class I agents still recommended by recent guidelines. Intravenous new class III agents as dofetilide and ibutilide have high and rapid efficacy in converting AF to sinus rhythm but require strict surveillance with ECG monitoring during and after intravenous administration because the potential risk of QT prolongation and Torsades de Pointes which can be prevented and properly managed. Vernakalant, a partial atrial selective was shown to have a high success rate and to be safe in real life use.

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1. Cardioversion of recent-onset AF using intravenous antiarrhythmic therapy 3-02 2021-Ref-Lines-Last.p available at https://authorea.com/users/403411/articles/514870-cardioversion-of-recentonset-atrial-fibrillation-using-intravenous-antiarrhythmics