

The efficiency of electrocardioversion-induced rhythm restoration performed in University Clinical Center Tuzla

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Background: Atrial fibrillation, as the most common type of arrhythmia, affects 1-2% of general population. Currently more than 6 million Europeans are experiencing this condition, since the average age of population is increasing, and it is expected that this number will rise in next 50 years by 250%. Atrial fibrillation usually leaves lasting consequences on patients overall health. Preventing them is the main therapeutic goal.¹⁻³ The main objective of this study was to inspect the efficiency of sinus rhythm restoration by means of electrocardioversion. Hemodynamically unstable patients (suffering from angina pectoris or hypertension), unresponsive to resuscitation, are subjected to emergency electrocardioversion. On the other hand, stable patients should undergo electrocardioversion procedure after three week long anticoagulant treatment with warfarin. Patients should continue taking warfarin for four weeks after the procedure in sake of blood clot forming prevention.

Case report: From January 2017 to September 2018, 58 elective cardioversion cases were done by the Intensive Therapy Unit of the University Clinical Center of Tuzla, 12 of which were atrial flutter patients, while 40 patients had atrial fibrillation. From those 40 cases of atrial fibrillation, 6 patients underwent two cardioversion treatments using 150 J of energy, followed by single 200 J treatment. In 50 cases patients were brought back to sinus rhythm straightaway after the first treatment.

Conclusion: Although efficiency rate is high (96%), qualified personnel and suitable equipment remain the most important requirements for successful and safe electrocardioversion. In long-term fibrillation, success rate of electrocardioversion and sinus rhythm perseverance decreases over time, especially if it lasts for more than a year. In that case, monitoring of the heart rate and anticoagulative therapy should be minded.

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LITERATURE

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