

Smrtnost i učestalost malignih aritmija u bolesnika s dilatativnom kardiomiopatijom i implantabilnim kardioverter defibrilatorima u primarnoj i sekundarnoj prevenciji

Mortality and incidence of malignant arrhythmias in patients with dilated cardiomyopathy and implantable cardioverter defibrillator in primary and secondary prevention

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Uvod: U bolesnika s dilatativnom kardiomiopatijom (DK) s reduciranom ejekcijskom frakcijom i očekivanim preživljenjem duljim od godinu dana indicirana je implantacija implantabilnog kardioverter defibrilatora (ICD) u primarnoj prevenciji (PP). Implantacija ICD-a u sekundarnoj prevenciji (SP) je indicirana nakon kardijalnog aresa i kod simptomatske ventrikulske tahikardije. Rezultati Danskog registra nisu pokazali smanjenje ukupne smrtnosti u bolesnika s neishemijskom DK (NDK).^{1,2} Cilj studije je analizirati podatke iz centra u KB Merkur.

Rezultati i zaključak: Od 2012. do 2017. godine implantirano 89 ICD-a bolesnicima s DK, 69 u PP i 20 u SP. Podaci su retrogradno skupljeni i analizirani. Prosječna dob bolesnika bila je 62,9 godine, od 89 bolesnika 13 su bile žene. Prosječno praćenje iznosilo je 32 mjeseca. U PP bilo je 69 bolesnika, 36 s ishemijskom dilatativnom kardiomiopatijom (IDK) i 33 NDK-om. Smrt je nastupila u 9 bolesnika (7 IDK vs 2 NDK) 7 radi zatajivanja srca (ZS) i 2 radi nekardijalnog uzroka (u NDK). U 12 bolesnika spriječena je iznenadna srčana smrt (ISS) (7 IDK vs 5 NDK). Ukupno je bilo 30 prikladnih aktivacija uređaja (PA), značajno više u IDK (23 vs 7; $p < 0,05$). Od 29 bolesnika mlađih od 59 godina terapija je isporučena u 3 bolesnika, a od 40 starijih isporučena u 9 bolesnika. U SP bilo je 15 bolesnika s IDK i 5 s NDK. Smrt je zabilježena u 5 bolesnika (3 IDK vs 2 NDK), sve kao posljedica ZS-a. U 4 bolesnika spriječena je ISS (3 IDK vs 1 NDK). Ukupno je bilo 8 PA (7 IDK vs 1 NDK). 16 bolesnika bilo je starije od 59 godina, a svi u kojih je spriječena ISS bili su stariji od 59 godina. U obje skupine bio je 51 bolesnik s IDK i 38 s NDK. Smrt je zabilježena u 14 bolesnika, (5 s IDK vs 9 s NDK). U 16 bolesnika spriječena je ISS (kod 10 s IDK vs 6 s NDK). Ukupno je bilo 38 PA (kod 30 s IDK vs 8 s NDK ($p < 0,05$)). Sve PA su bile u muškaraca ($p < 0,05$). Bilo je 33 bolesnika mlađih od 59 godina (3 PA), a u starijih bolesnika ukupno njih 56 (14 PA). Nije zabilježena statistički značajna razlika u ukupnom mortalitetu između IDK i NDK, ni u broju ISS. Zabilježen je statistički značajan veći broj PA u IDK, u PP i ukupno. Muški spol nosi veći rizik za ISS. Mlađa dob ne nosi veći rizik ISS.

Introduction: Implantation of implantable cardioverter defibrillator (ICD) as a primary prevention (PP) is indicated in patients with dilated cardiomyopathy (DCM) with a reduced ejection fraction as well as a life expectancy longer than a year. Implantation of ICD as a secondary prevention (SP) is indicated after cardiac arrest and in patients with symptomatic ventricular tachycardia. Results of a Danish register did not show mortality to decrease in patients with non-ischaemic cardiomyopathy (NCM).^{1,2} The goal of our research is to analyze results from University Hospital "Merkur".

Results and Conclusion: From 2012 up to 2017 a total of 89 ICDs were implanted due to DCM, 69 for PP and 20 for SP. Data was collected retrospectively and analyzed. The average age of our patients was 62.9 years, 13 out of 89 were women. The average follow up lasted 32 months. 69 patients were treated due to PP, 36 with ischemic cardiomyopathy (ICM) vs 33 with NCM. Death occurred in 9 patients (7 with ICM vs 2 with NCM), 7 died due to heart failure (HF) and 2 due to noncardiovascular cause (in NCM group). Sudden cardiac death (SCD) was prevented in 12 patients (7 ICM vs 5 NCM). There were 30 appropriate ICD therapy deliveries, significantly more in the group of patients with ICM (23 vs 7; $p < 0.05$). In patients younger than 59 (29 patients) ICD therapy was delivered in 3 patients, and in a group of older patients (40 patients) ICD therapy was delivered in 9 patients. 15 patients with ICM and 5 with NCM were treated due to SP. Death occurred in 5 patients (3 ICM vs 2 NCM), all due to HF. In 4 patients SCD was prevented (3 ICM vs 1 NCM). There were 8 appropriate ICD therapy deliveries (7 ICM vs 1 NCM). 16 patients were older than 59, and all patients in which SCD was prevented, were older than 59. In both groups there were 51 patient with ICM and 38 with NCM. Death occurred in 14 patients (5 ICM and 9 NCM). SCD was prevented in 16 patients (10 ICM vs 6 NCM). In total there were 38 appropriate ICD therapy deliveries (30 ICM and 8 NCM, $p < 0.05$) and all of them occurred in men ($p < 0.05$). There were 33 patients younger than 59 (with 3 appropriate ICD discharge) and 56 older than 59 (with 14 appropriate ICD discharge). We did not detect a significant difference in total mortality between ICM and NCM, neither in the number of SCD. Statistically significant higher numbers of appropriate ICD discharge was detected in the ICM group for PP and in total. Male gender carries a higher risk for SCD. Younger age does not carry a higher risk for SCD.

LITERATURE

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