



## Prva implantacija kardioverter-defibrilatora u Općoj bolnici Dubrovnik

## The first implantation of cardioverter-defibrillator in the Dubrovnik General Hospital

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Dana 19. svibnja 2010. godine u Općoj bolnici Dubrovnik implantiran je prvi ICD uređaj (kardioverter-defibrilator). Zahvat je izveden pod supervizijom prof. Sutlića i ing. Fereka iz Zagreba. Zahvat su planirali i učinili dr. Igor Hozić, dr. Jerko Ferri Certić i dr. Rikard Lenz. Dio kardiologije koji se bavi ritmologijom i elektrostimulacijom time je učinio zahvat koje osim kliničkih bolnica radi jedino Opća bolnica Zadar. Tim koji čine dr. Hozić i dr. Ferri je značajno napredovao tijekom tri godine. Od početnih skromnih ugradnji jednokomornih elektrostimulatora srca nastavili smo edukaciju i usavršavanje preko dvokomornih malo zahtjevnijih, pa sada i ICD. Treba reći da je ICD implantacija tehnički vrlo slična implantaciji dvokomornog elektrostimulatora, ali je kardiološki dio puno kompliciraniji. Također, potrebno je izazvati i aritmiju VF/VT koju uređaj treba prepoznati i elektrošokom vratiti u normalan ritam. Time se provocira događaj koji je u izvanbolničkim uvjetima u pravilu letalan i poradi kojega se ovakvi uređaji implantiraju. Radi se o uređaju koji je sekundarna prevencija iznenadne srčane smrti i mi ćemo ugrađivati bolesnicima koji za to imaju apsolutnu indikaciju tzv. I A razred. Ujese se uz prethodnu dodatnu edukaciju planira uvesti i resinkronizacijska terapija CRT-ICD.

Svi ovi zahvati zahtijevaju po EU EHRA standardima određeni broj godišnjih zahvata o kojem strogo vodimo računa i po timu dr. Hozić-dr. Ferri imaju tri puta više zahvata nego što EU standardi zahtijevaju. Planira se i dodatna edukacija (Rim-Ljubljana-Tolochenaz), a tijekom sljedeće godine jedan član tima će polagati i EHRA ispit.

On 19<sup>th</sup> May 2010 the first ICD device (cardioverter-defibrillator) was implanted in the Dubrovnik General Hospital. The procedure was performed under supervision of Prof. Sutlić and Ferek, Engineer from Zagreb. The operation was planned and performed by Dr. Igor Hozić, Dr. Jerko Ferri Certić and Dr. Rikard Lenz. A part of cardiology engaging in rhythmology and electrostimulation performed a procedure that except for the clinical hospitals are only performed in the Zadar General Hospital. The team consisting of Dr. Hozić and Dr. Ferri has greatly improved during the period of three years. Starting from the initial modest implantation of one-chamber heart electrostimulators, we continued with training and education using two-chamber electrostimulators which are more demanding, and now we use ICD as well. It is worth mentioning that ICD implantation is technically very similar to the implantation of two-chamber electrostimulator, but the cardiologic part is much more complicated. It is also necessary to cause arrhythmia of VF/VT to be recognized by the device and apply electroshock to cause normal rhythm. This is how the event which is principally lethal in out-of-hospital conditions is provoked and which is the reason for implantation of such devices. This is the device which is a secondary prevention of sudden cardiac death and we shall implant it to patients that have an absolute indication for it, the so-called I A class. In autumn the resynchronization therapy CRT-ICD is to be introduced with previously organized additional education and training.

All these operations, according to EU EHRA standards, require a specific number of annual operations that we





Danas veliki dio bolesnika, a osobito stranaca — turista, ima ugrađen neki od sofisticiranih uređaja u srca, a OB Dubrovnik je ucrtana u karti centara koji takve aparate mogu kontrolirati. To nije tako nevažno s obzirom na Dubrovnik kao elitnu turističku destinaciju.

Na kraju, moramo istaknuti da su iznimnim razvojem kardiologije u OB Dubrovnik osobito invazivni laboratorij uz redoviti servis skupih uređaja postali veliki potrošači koji nadilaze okvire opće bolnice. Ravnateljstvo bolnice je osiguralo sredstva za, možemo reći, osnovno održavanje ovih projekata i stvaranje pretpostavki za ekspanzivniji rast u budućnosti.

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strictly comply with, and the team consisting of Dr. Hozić and Dr. Ferri have three times more operations than required by the EU standards. Additional training and education is planned (Rim-Ljubljana-Tolochenaz), while during the next year one team member will take the EHRA exam.

Today, a great number of patients, especially foreigners, tourists, have one of the sophisticated devices implanted in the heart and the Dubrovnik General Hospital is mapped as a center that may control such devices. This is not irrelevant considering Dubrovnik as the elite tourist destination.

Eventually, we must point out that with extensive development of cardiology, the invasive laboratory in the Dubrovnik General Hospital considering regular servicing of expensive devices has become one of the large consumers that exceed the limits of a general hospital. The Hospital Directorate has provided funds for, let us say, basic maintenance of these projects and creation of prerequisites for more extensive development in the future.

Poslijediplomski tečaj trajnog medicinskog usavršavanja I. kategorije:

## “Srčane aritmije — racionalni pristup”, 23. do 25. rujna 2010.

**Organizator:** Medicinski fakultet u Zagrebu

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Zbog većeg interesa i ograničenog broja mjesta obaveza je prijava i potvrda o kotizaciji najmanje tjedan dana prije početka tečaja.

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1<sup>st</sup> category Postgraduate course in continuous medical training:

## “Cardiac Arrhythmias — Rational Approach” Zagreb, 23<sup>rd</sup> - 25<sup>th</sup> Sep 2010

**Organized by:** University of Zagreb, School of Medicine

**Course led by:** Ass Prof Davor Puljević, PhD

**Secretary:** Mislav Puljević, MD

**Place:** Clinic for Cardiovascular Diseases of the Clinical Hospital Centre Zagreb

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Due to greater interest and a limited number of seats, the registration and verification of quotation not later than a week before the start of the course is mandatory.

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