



Vijest

News

20. obljetnica transplantacije srca u Kliničkom bolničkom centru Zagreb

20th anniversary of heart transplantation in the Clinical Hospital Centre Zagreb

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Davne 1967. god. u Capetownu, u Južnoafričkoj Republici, kalifornijski kirurg dr. **Christian Bernard** izveo je prvu transplantaciju srca koja je trajala samo povijesnih 48 minuta. Godine 1984. izvedena je u Beču, a samo četiri godine poslije, 30. rujna 1988., u večernjim satima izvedena je prva transplantacija srca u tadašnjoj Jugoslaviji, na Kliničkom bolničkom centru Zagreb, pod vodstvom prof. dr. **Josipa Sokolića**. Srce je presađeno 57 godišnjoj bolesnici koja je bolovala od teške koronarne bolesti i kombinirane aortalno-mitralne greške.

Godine 2008. KBC Zagreb obilježava 20. obljetnicu prve transplantacije srca povodom čega je 19. prosinca u hotelu Westin u Zagrebu i održan simpozij u organizaciji Klinike za kardijalnu kirurgiju i Klinike za bolesti srca i krvnih žila KBC-a Zagreb i Medicinskog fakulteta Sveučilišta u Zagrebu. Glavni pokrovitelj simpozija bila je Pliva Hrvatska d.o.o., a nakon simpozija održan je i Božićni domjenak Hrvatskog kardiološkog društva.

Na simpoziju je sudjelovalo nekoliko eminentnih stručnjaka iz Hrvatske i inozemstva koji se bave transplantacijskom kardiokirurgijom i kardiologijom, predvođenih prof. dr. **Bojanom Biočinom** i prof. dr. **Davorom Miličićem**. Uz njih predavanja su održali neki od vodećih hrvatskih kardiokirurga, prof. dr. **Ivan Jelić** i doc. dr. **Vedran Ćorić**, kao i vodeći hrvatski i svjetski kardiolozi poput prim. dr. **Danijela Planinca** iz KB Sestara Milosrdnica, dr. **Maria Kašnera** iz Charité-Universitätsmedizin u Berlinu,

In the early 1967, the California surgeon **Christian Bernard**, MD performed the first heart transplantation lasting for only historic 48 minutes in the town of Capetown in South African Republic. In 1984, the heart transplantation was performed in Vienna and only after 4 years, on 30th September 1988 during the evening hours the first heart transplantation was performed at the Clinical Hospital Centre Zagreb in former Yugoslavia headed by Prof. **Josip Sokolić**, Ph.D. The heart was transplanted in 57-year-old patient that suffered from a serious coronary disease and combined aortic and mitral failure.

In 2008 the Clinical Hospital Centre Zagreb celebrates the anniversary of the first heart transplantation and on that occasion, on 19th December the symposium of the Cardiac Surgery Clinic and Heart Disease and Blood Vessel Clinic of the Clinical Hospital Centre Zagreb and Faculty of Medicine of the Zagreb University was held in the Westin Hotel in Zagreb. The main sponsor of the symposium was Pliva Hrvatska d.o.o. and following the symposium, a Christmas party of the Croatian Cardiac Society was organized.

The symposium was attended by several renowned experts from Croatia and abroad who engage in transplant cardiac surgery and cardiology, headed by Prof. **Bojan Biočina**, Ph.D. and Prof. **Davor Miličić**, Ph.D. Besides them, the lectures were held by some of the leading Croatian cardiac surgeons, Prof. **Ivan Jelić**, Ph.D. and Assistant Prof. **Vedran Ćorić**, Ph.D. and some leading Croatian and international cardiologists such as head doctor **Danijel Planinc**, MD from the Clinical Hospital Sestre milosrdnice,



prof. dr. **Johna Wallworka** iz Papworth Hospital u Cambridgeu i prof. dr. **Ernsta Wollnera** iz Allgemeines Krankenhaus u Beču.

Cjelina simpozija tematski se kretala od sjećanja na prvu transplantaciju srca u svijetu i Hrvatskoj, pregleda 20 godišnjeg transplantacijskog iskustva na KBC-u Zagreb, programa transplantacijske kardiologije u Klinici za bolesti srca i krvnih žila KBC-a Zagreb, od njegovog začetka do prvih rezultata, kao i pregleda najnovijih rezultata transplantacijske kardiokirurgije na KBC-u Zagreb. Strani predavači iznijeli su svoje spoznaje o srčanom zatajavanju, izazovima kardijske transplantacije u 21. stoljeću i budućnosti kardiokirurgije u liječenju terminalnog srčanog zatajavanja. Poseban naglasak stavljen je da imperativ obrazovanja budućeg kadra u okviru kardijske transplantacijske medicine i osnivanja timova kardiokirurga, kardiologa i kardijskih anesteziologa.

U zaključku je izneseno da je transplantacija srca zlatni standard današnjice u liječenju terminalnog zatajavanja srca refraktornog na farmakološku terapiju, najčešće u slučaju kardiomiopatija (dilatativnog ili ishemijskog podrijetla). Pritom ostaje pitanje daljnjeg suzbijanja komplikacija kao što su doživotna imunosupresivna terapija i rizik odbacivanja organa, infekcije, sepse, disfunkcije grafta, vaskulopatija, cerebrovaskularnog infarkta, bubrežne disfunkcije i posljedične dijalize, hipertenzije, hiperlipoproteinemije, šećerne bolesti i malignoma.

Mortalitet današnje transplantacijske kardiokirurgije na KBC-u Zagreb procijenjen je na 25%. Dodatni etički naglasak je na izboru primatelja što je i danas predmet mnogih polemika u odnosu na najbolje pripremljenog pacijenta ili najtežeg pacijenta. Kao predmet istraživanja budućnosti transplantacijske medicine u kardiokirurgiji i kardiologiji dan je pregled mogućnost uzgoja ksenografta, VADs-a, primjene matičnih stanica i genske terapije, sa naglaskom na mehaničku cirkulatornu potporu kao "bridge to transplantation" metodu.

Usprokos tomu u sadašnjici i dalje se daje prednost poštudnim tehnikama, uz optimalnu farmakološku terapiju, poput koronarne revaskularizacije miokarda, valvularnog "repaira" ili zamjene, resekcije ventrikula i novije kardijske resinkronizacijske terapije.

Sagledavši sve preglede iznesene na simpoziju postavlja se pitanje ostaje li zasad transplantacija srca oblik dugoročne palijativne skrbi za podvrgnute pacijente ili konačno rješenje budućnosti usavršavanjem novih medicinskih zna-
nija.

Mario Kašner, MD from Charité-Universitätsmedizin in Berlin, Prof. **John Wallwork**, Ph.D. from the Papworth Hospital in Cambridge and Prof. **Ernst Wollner**, Ph.D. from Allgemeines Krankenhaus in Vienna.

The topic of the whole symposium ranged from remembering the first heart transplantation internationally and in Croatia, review of the 20-year transplantation experience at the Clinical Hospital Centre Zagreb, the transplantation cardiology program in the Heart Disease and Blood Vessel Clinic of the Clinical Hospital Centre Zagreb from its inception to the first results as well as the review of the latest findings of the transplantation cardiac surgery at the Clinical Hospital Centre Zagreb. The international lecturers presented their experiences and knowledge about heart failure, challenges of cardiac transplantation in the 21st century and the future of the cardiac surgery in the treatment of terminal heart failure. A special emphasis was placed on education of the future staff within the cardiac transplantation medicine and establishment of teams of cardiac surgeons, cardiologists and cardiac anesthesiologists.

The conclusion states that the heart transplantation is the golden standard in today's world in treatment of terminal heart failure refractory to pharmacological therapy, most usually in the event of cardiomyopathy (of dilatative or ischemic origin). There is an open issue related to further prevention of complications such as life-time immunosuppressive therapy and the risk of rejecting organs, infections, sepsis, graft dysfunction, vasculopathy, stroke, renal dysfunction and consequential dialysis, hypertension, hyperlipoproteinemia, diabetes and malignoma.

The death rate of the today's transplantation cardiac surgery at the Clinical Hospital Centre Zagreb is evaluated at 25%. An additional ethic emphasis is placed on a selection of receivers which is even today subject to many controversies with respect to a definition of best prepared patient or most serious patient. An overview of possibility of growing xenograft, VADs, application of stem cells and gen therapy with an emphasis placed on mechanical circulatory support such as a "bridge to transplantation" method has been provided as a research subject in the future of transplantation medicine in cardiac surgery and cardiology.

In spite of that even during the present times, conservative techniques are prioritized accompanied by optimum pharmacological therapy, such as coronary myocardial revascularization, valvular repair or replacement, resection of ventricles and more recent cardiac therapy resynchronization.

Having considered all reviews presented at the symposium, there is an open question as to whether the heart transplantation remains a type of long-term palliative care for patients undergoing such treatment or a final solution in the future followed by advancement of new medical sciences.

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