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**Kardio list Online 2007;2(3):18.**

**The meeting of the Branch office of Croatian Cardiac Society of Slavonia and Baranya**

Samardžić Pejo  
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The meeting of the Branch office of Croatian Cardiac Society of Slavonia and Baranya was held in Slavonski Brod on the 17th February 2007. The agenda was ischaemic mitral insufficiency. Danijel Planinc, MD, chief physician, (Clinical picture and diagnostics of ischaemic mitral insufficiency), Nada Nikić, MD chief physician (TEE and the valuation of ischaemic mitral insufficiency) and Željko Sutlić, MD, Professor (Surgical treatment of ischaemic mitral insufficiency) were presenters on the meeting. The members of Society from all 5 Slavonian regions were present as well as their colleagues from Zagreb and Split. There were altogether 45 participants. Problems concerning diagnostics and treatment of ischaemic mitral insufficiency were discussed. They also elaborated about ST-segment elevation myocardial infarct in Slavonia. It was emphasized that present co-operation between our hospitals should be continued. Next meeting will be held in the autumn this year in Vukovar-Srijem County.

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Received 19th Feb 2007; Available online 25th Feb 2007

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**Public health aid “For my heart”**

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Croatian Cardiac Society and Croatian Nursing Cardiac Association organized public health aid “For my heart” on the 10th March 2007 on Cvjetno square. Cardiovascular diseases are one of the biggest mortality causes and such, they represent number one modern man assassin. Every second death in Croatia is caused by vascular diseases, and 17.5 million lives in the world are taken because of it. Such overwhelming data emphasize the importance of keeping down the cause of the risk. By doing that, even 80% of heart attacks and strokes could be prevented. The main aim of the action was to acknowledge the importance of heart and artery diseases prevention. Many citizens joined the event, and whoever was interested got
the chance to take blood pressure, body mass index and they could get the valuation of cardiovascular risk from the experts. The most important role in the prevention from heart and artery diseases lies on each individual. No pill can substitute neglect on your own health. By accepting all preventive measures and healthy living habits the main causes of the sicknesses and mortalities could be lowered in nearby future. Participants from Croatian Nursing Cardiac Association were from: Clinical Hospital “Sestre milosrdnice”, Zagreb (Božica Leško, Jadranka Daskijević, Lidija Ban, Lidija Posavec), Clinical Hospital “Merkur”, Zagreb (Zdenka Ćurić), Clinical Hospital “Dubrava”, Zagreb (Sanja Piškor, Martina Osredečki, Mara Žulj, Biljana Šego) Polyclinic for the Prevention of Cardiovascular Diseases and Rehabilitation, Draškovićeva, Zagreb (Marija Śvajcer, Vlatka Kolek, Nada Hrstić, Branka Dumbović) and Clinical Hospital Center “Rebro”, Zagreb (Ana Ljubas, Danijela Borbaš, Kata Mišuram Martina Miovec, Andreja Franjević, Klaudija Ancić, Katija Kolarec).

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FP 6 EU project: HEARTFAID

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“Universita di Milano Bicocca” organized the fourth meeting to celebrate the first anniversary of HEARTFAID project realization on the 20th and 21st February 2007 in Milan. The basic aim of this three year long cardiac-computing project is a development of computing services platform which will help in decision-making among senior patients who have been diagnosed with cardiac failure. In this project, where budget is 3.2 million EUR, participates consortium of scientists from 10 top quality institutions from EU and Institute of Electronics from Rud er Bošković Institute (IRB), Croatia. The project develops and uses the most modern computing techniques and it represents interdisciplinary study of scientists with different profile. Domenico Conforti, MD, PhD, Professor is the project manager. The report was given about achieved results in the first year of project realization. Discussion took place about future plans and about annual report proposal for the following year which will be submitted to independent reviewers in March this year in Brussels headquarters by a project manager and Scientific External Advisory Board (STAB) members. Next big meeting within this project is going to be held in Zagreb at the end of June this year. The results achieved in gathering and presentation of medical knowledge regarding cardiac failure and also the first working prototypes of gathering and transmitting information and related platform will be presented on the meeting. It will be an excellent chance to host some of the most prestigious European cardiologists and scientists who apply information science to medicine. The main organizer and host will be IRB (Dragan Gamberger, MD, PhD, Senior Scientist and Head of the Laboratory, Tomislav Šmuc, MD, PhD, Senior Research Associate and associates. Distinguished European cardiologist Gianfranco Parati, MD, Professor (Univeristy of Milano “Bicocca”), Mariaconseuli Valentini, MD, docent (Istituto Auxologico Italiano, S. Luca Hospital, Milan), Kalini Kawecka-Jaszcz, MD, Professor (Jagielloniana University Medical College, Krakow) and Francescu Perticone, MD, Professor (University “Magna Graecia” of Catanzaro) will be hosted by Goran Krstaćić, MD, PhD, chief physician, a STAB member and stringer of the Institute for the Prevention of Cardiovascular Diseases and Rehabilitation.

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Action in co-operation with Krapina-Zagorje County – the battle for health

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Krapina-Zagorje County together with the Health Commission of the same County has organized the action ‘The battle for health’. The main reason for such an action was statistical
data which shows that the most common cause of death are cardiovascular diseases. This action has included internists from Zabok general hospital and Special hospital for medical rehabilitation Krapinske Toplice.

On all radio stations of Krapina-Zagorje County one hour lectures will be broadcasted that will firstly include journalist’s questions concerning the cause, healing and prevention of cardiovascular diseases. In the second part of the broadcast listeners questions will be answered. This action will take place periodically throughout the year from February 2007. Public lectures about health and healthy living and the suppression of causes for cardiovascular diseases will be held.

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Fabry disease

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Fabry disease (FD) is a genetic disorder which is caused by a deficiency of the lysosomal enzyme alpha-galactosidase A (α-gal A). This disease is characterized by a disorder of glycosphingolipids globotriaosylceramide degradation (GL3) which is accumulated within the blood vessels, other tissues, and organs. This accumulation leads to a dysfunction of cardiovascular, uropoetic and nervous system. FD is X-linked recessive inherited disease. Therefore, male descendants who inherit defective gene will get FD, and female descendants will become its carrier with the possibility to transmit it on male descendants. However, the fact that FD is also present among women raises the possibility of X-linked dominant mode of inheritance. Prevalence of FD is estimated to 1:40000 male, and therefore it is believed that the number of diagnosed patients today is considerably lower than the assumed number. It is possible that the FD symptoms aren’t recognized or that according to the symptoms patients are wrongly separated in other clinical entities. Failure to appreciate signs and symptoms of FD is often caused by considerably restrictive clinical measures which are result of the remaining α-gal A activities. In these measures cardiac symptoms dominate.

In a cardiac way, FD is usually manifested in progressive left ventricular hypertrophy (LVH) with preserved systolic function and mild lesions of relaxation. It is believed that at least 8% male and 12% adult females with (concentric, asymmetric and apical) LVH have unidentified FD. However, FD can be manifested by other cardiac disorders, which are caused by accumulation of GL3 on different heart structures:

• angina pectoris or myocardial infarction due to spasm of coronary artery, with or without stenotic lesions (atherosclerosis);
• heart valve injury (it is usually manifested as mitral insufficiency);
• disorders of heart rhythm (short PR interval, atrioventricular block, sometimes with sudden cardiac death);
• congestive cardiac weakness due to diastolic dysfunction of left ventricle.

The basic diagnostic procedure is echocardiography, which includes tissue Doppler. Pathological report of tissue Doppler is already present in an early stage of disease where LVH is not yet seen. Techniques for checking the deficiency of enzyme α-gal in plasma, leucocytes, tears and tissue biopsy can be used in lab diagnostics. The method of screening is test free and available in Croatia for testing the activity of enzymes from dry drop of blood (more data can be found from Genzyme Europe B.V.). Method which definitely confirms the activity of α-gal A from blood is done in the Laboratory of Metabolic Diseases in Clinical Hospital Center “Rebro”, Zagreb (testing is done according to referral slip of Croatian National Institute of Public Health).

By the year 2001; treating patients who suffer from FD was purely symptomatic. The advance of techniques in molecular genetics has resulted with the introduction of enzyme replacement therapy (ERT). Agalsidase beta is the most used therapy in Europe (it can be found on Expensive pills list, Croatian National Institute of Public Health, under name of Fabrazyme, Genzyme). It is an enzyme preparation that has shown good efficiency and tolerance. ERT results in enhanced elimination of GL3 from infected cells, which results in the reduction of myocardial mass, better function of left ventricular and normalization of electrophysiological disorders (for instance; complete resolution was shown of right bundle branch block after 6 months of ERT).

Till now, only 2 patients with FD are diagnosed in Croatia, and in nearby Slovenia 30 of them. According to data about prevalence, it is believed that at least 15-20 men are suffering form
FD. Since cardiac manifestations are among the most recognizable symptoms, cardiologists have the biggest chance to recognize patients with FD.


References


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Recommendations for treating patients with stroke

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New modernized recommendations for treating patients with stroke have been published in Acta Clinica Croatica, September 2006. They reflect attitudes of:
• Clinic for Neurology of Clinical hospital “Sestre milosrdnice”, which is also Reference center of the Ministry of Health and Welfare of the Republic of Croatia;
• Croatian Society for Neurovascular Disorders of Croatian Medical Association;
• Croatian Society for Strokes.
These recommendations are in accordance with medicine and are based on proofs, and they are consistent with European Initiative for Strokes (European Stroke Initiative – EUSI) as well as with the American guidelines. They are divided in 3 parts. The first part deals with the patients with stroke and taking care of them. It includes the education of personnel from the point of how to recognize those patients, to further procedure of transporting the same to an institution which could take care of them. The first part also includes accommodation of the patients in Units for strokes, as well as the procedures during urgent care of the patients. The second part deals with treatment of acute stroke, general and specific treatment, and recommendations for treating patients with intracranial hemorrhage. This part includes prevention and treatment of complications of a stroke and recommendations for rehabilitation. The third part deals with primary and secondary prevention. These modern recommendations are more extensive compared to the last one, recommendations for treating rare types of a stroke are bit detailed, but recommendations for primary and secondary prevention are much more modernized after publishing the results of studies. Recommendations for treating patients with the stroke are available on the web pages Acta Clinica Croatica.

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Kardio list Online 2007;2(3):22.

Kardio list sponsors’ page

Dual treatment with antiplatelet drugs among patients with implanted coronary stent

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Scientific warning from Circulation “Prevention of Premature Discontinuation of Dual Antiplatelet Therapy in Patients With Coronary Artery Stents”, is a result of actual debate about benefits of using stent which elutes the drug (DES, drug eluting stent). Grines et al.
are giving this warning on behalf of American Heart Organization, American Cardiac Association, Society for Cardiovascular Angiography and Intervention, American Surgical Association and American Dental Association together with the representatives of American Medical Association. (1)

Dual antiplatelet treatment with acetylsalicylic acid (ASA) and drugs from group of thienopyridine, clopidogrel (Zyllt®) and ticlopidine (Tagren®) drastically decreases the number of heart side effects after coronary stent is implanted in comparison with treatments which used only ASA or combination of ASA and warfarine (Marivarin®). However, many doctors and patients suspend the treatment rather too soon, and thus increase the risk of stent thrombosis which causes myocardial infarction and/or death. Factors that contribute to it include treatment expenses, doctor’s or dentist’s advise to suspend the treatment before different interventions take place, inadequate patients’ instructions and non-acceptance of the treatment importance. Some recommendations for stopping the early suspension of dual antiplatelet therapy are following:

• Prior to stent implantation, a doctor has to decide about the need for dual treatment. If there are no expectations that the treatment is going to hold-up within 12 months due to economic or other reasons, implementation of DES should be avoided
• Among patients who are being prepared for percutaneous coronary intervention, and who will probably be subject to invasive or surgical procedure within 12 months, implementation of metal stent or balloon angioplasty with provisory stent implementation should be considered instead of routine DES implementation.
• Doctors must be sure that the patients, before leaving the hospital, are well informed about the reasons why have they been prescribed thienopyridine, and about risks that can appear if the treatment is suspended too soon, even if that is advised by a different doctor.
• Doctors who do these invasive and surgical interventions and who are concerned about hemorrhage during or after the intervention must be aware of potential risk if the treatment with thienopyridine is suspended too soon.
• Elective interventions in which there is considerable risk of hemorrhage must be postponed till the dual treatment is finished (12 months after DES implementation among patients where there is no bigger risk of hemorrhage and 30 days at least after metal stent is implanted).
• Patients who have been treated with DES and who should undergo interventions that ask for the treatment suspension, should, if possible, continue with taking ASA, and after the intervention continue with dual treatment as soon as possible.
• Health industry, insurance companies, US congress and pharmaceutical industry should take in consideration that dual treatment shouldn’t be suspended because of the price.

References


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Received 2nd Feb 2007; Available online 12th Feb 2007


Kardio list sponsors’ page

DOCTORS APPRECIATE THEM,
PATIENTS TRUST THEM

VASILIP, simvastatine
Pills of 10mg, 20mg and 40mg

Indications: coronary disease, hyperlipidemia.
Dosage: recommended daily dosage is 80mg. For the organ transplanted patients who take cyclosporine recommended dosage is 10mg.
Interaction: Taking simvastatine and cyclosporine, derivatives of fibric acid, niacin, erythromycin, klarythromycin, ketoconazole, itraconazole, nefazodone and ritonavir at the same time can result in myophaty with rhabdomyolysis and kidney function cancellation. Taking simvastatine and warfarine can intensify the impact of warfarine on coagulation and thus raise the risk of hemorrhage. Among patients who take simvastatine and digoxin at the same time the level of digoxin in serum can be raised; accordingly these patients should be thoroughly monitored.

Side effects: Most patients can tolerate simvastatine well. Its side effects are usually mild. Nausea, constipation, flatulence, dyspepsia, stomach ache, diarrhea, vomiting, headache, sleeping disorders and decreased level of liver enzyme can appear. Dizziness, tiredness, muscular weakness, itching and excessive falling of hair are much rare side effects. Important but very rare group of simvastatine side effects belong to muscular disorder (Myophaty) which is manifested in muscular stiffness and pain and higher level of keratin-phosphokinase (muscular fraction) in blood. Rhabdomyolysis can develop rarely and it can cause kidney function cancellation.

Package: 20 and 28 pills of 10 mg and 20mg; 28 pills of 40mg.

Date of the text preparation: September 2006.

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\text{ATORIS atorvastatine}
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Pills \text{ of 10mg, 20mg}
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Indications: primary hyperlipidemia of type IIa and IIb, including polygen hypercholesterolemia and mixed hyperlipidemia.

Dosage and ways of taking pills: Recommended daily dosage is 10mg. The ultimate dosage is 80mg.


Interactions: Taking Atoris and cyclosporine antibiotics (erythromycin, klarythromycin, kinupristine and dalfoprisitne), protease inhibitors, derivatives of fibric acid, niacin, azole antmicotic or nefazodone at the same time can cause myopathy with rhabdomyolysis and kidney insufficiency. There is a need for caution when atrovastatine is taken together with digoxin and warfarine.

Side effects: Most patients can tolerate atrovastatine well. Side effects that can occur are: gastrointestinal disorder, headache, muscular pain and sleeping disorder. Significant, but rare group of side effects represent muscular disorder (myopathy) which is manifested as pain and muscular weakness and higher level of muscular fraction of creatine-kinaze (CK).

Over dosage: Constant monitoring is needed as well as keeping work of vital functions and preventing further drug absorption.

Medicine distribution: only on medical REFERENCE

Package: 30 atrovastatine film-pills of 10mg and 20mg.

Date of text preparation: September 2006.

**Kardio list Online 2007;2(3):24.**

**CRT and dilated cardiomyopathies: understanding the deformation and mechanics of the failing ventricle**

Čikeš Maja
Clinical Hospital Center “Rebro”, Zagreb, Croatia.

A course on re synchronize therapy (CRT) and dilated cardiomyopathies will be held on the 17th and 18th May 2007 in hotel Excelsior, Dubrovnik. The topic about pathophysiological mechanisms underlying failing function in a dilated heart and how this can be used to assess response to CRT will be discussed on the 18th May.

Following questions will be discussed:
• Which ultrasound data and pictures are useful for the evaluation of CRT?
• How do strain and strain-rate change with ventricular dilatation?
• Why do some hearts rock?
• What is a septal flash and when do you see it?
• How do we identify filling problems that respond to pacing?
• How can we use knowledge on cardiac mechanics for CRT optimization?
• How do we identify potential responders?
Ivanuša Mario, Banfić Lovro
Kardio list and Web-portal Kardio.hr

From all together 6023 visitors during the first 2 months in 2007, the number of known states which accessed portal Kardio.hr was 3333 visitors or 55.3%. Accordingly, 2411 visitors (40.0%) were from Europe, 678 (11.3%) from North America, and 234 (3.9%) from Asia. 7 visitors were from Australia and 3 from Africa. More details can be seen in the table below.

From the 18th till 24th March 2007 the portal was visited by record number of visitors, all together 1142. March last year was the most visited month.

We invite you to visit our pages, and your remarks, suggestions, articles keep sending to kardio-list@kardio.hr.

Table 1
Visiting scale of Kardio.hr portal regarding states in January and February 2007

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