

NEWSLETTER OF THE FRIENDS



האיגוד הקרדיולוגי בישראל
ISRAEL HEART SOCIETY



OF THE ISRAEL HEART SOCIETY



Editor's Note: Welcome to the Summer/Fall 2013 FIHS Newsletter. The main topic of this issue is the 60th Annual Meeting of the Israel Heart Society this past April.

This issue includes the usual sections such as the President's Message and announcement of upcoming meetings. We have new research from Israel, and pictures of FIHS members who attended the IHS Conference.

Please note- description of new technology in our Newsletter does not constitute an endorsement. We just want to give our readership a sense of the vast scope of Israeli ingenuity in the fields of Cardiology.

Remember, this Newsletter and Society belong to you, the membership. We look forward to enhancing this Society and the connections that we hope to foster between Israeli and non-Israeli cardiologists and their institutions. Please feel free to email us with questions, answers, comments, criticisms, or just to tell us to keep working harder!

Our immediate goal is to try to grow our membership and participation to include any and all cardiologists and fellows from around the world who would be interested in supporting this bridging relationship. If you know of any cardiologists or cardiology fellows who we can contact, please email me (my email is jackstroh@usa.net).

It was a pleasure spending time with many of our members and Israeli counterparts in Jerusalem at the 60th Annual IHS meeting. See inside for pictures!

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By the way, here is the new link for the Israel Heart Society. Please browse the site!

<http://www.israel-heart.org.il/english>

We would like to welcome Dr. Yoseph Rozenman as the new President and the incoming Board of the Israel Heart Society!



Message from the President

We extend to all the Friends of the Israel Heart Society our best wishes for a happy and healthy new year!

This year, we were elated to celebrate with the Israel Heart Society during its 60th anniversary annual meeting in April 2013. In this newsletter, you will see the great many Friends who attended and participated in the meeting. Many of us were treated to a state visit to President Shimon Peres who delivered an eloquent discussion of science and local politics.

We are now entering our fifth year of the newsletter. Special thanks to Jack Stroh and all the contributors to the newsletter for putting together this wonderful and informative newsletter. After four years in Chicago, we have also had some administrative changes at the Friends of the Israel Heart Society. We would like to thank Debbie Burg for her four years managing the FIHS. With Debbie's help, we have made much progress. We would like to welcome Janice and Larry Brown who will be taking over the reins.

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Debbie Burg

In this period of transition, you will notice that we have compressed our summer and fall newsletters into one summer/fall newsletter. We would also like to acknowledge once again all of our sponsors – this was done in our winter newsletter with an update published in the spring newsletter (we apologize to those whose names did not carry over from the winter newsletter as a result of a programming error).

As the New Year is approaching, I would like to appeal to you to think about your role in the Friends of the Israel Heart Society. Rest assured that the Friends of the Israel Heart Society will continue on its trajectory to continue to promote scientific interchange with the Israel Heart Society. As you know, many of the programs we have been involved with have been initiated by our members. The support that we are able to provide the Israel Heart Society stems predominantly from the engagement

and support of our membership. Please feel free to contact me if you have any ideas.

We will once again be announcing the Fellow's Case Competition for the 12th International Dead Sea Symposium, a program that has brought American fellows to Israel to attend this conference. It has been a highly regarded program throughout the last several meetings.

The Friends of the Israel Heart Society has certainly grown over the last several years, but we know that we are not reaching many cardiologists or other cardiac-related specialists who would be interested in our activities. **WE NEED YOUR HELP** to reach these people! Please take a few moments to forward this newsletter to a few colleagues. If you have a few more moments, contact them to find out if they have signed up for membership.

It is also a good time to check if you have renewed your membership for 2013. We appreciate, in particular, those of you who have joined at one of the sponsorship levels. All the information is available on our website. Annual membership can be paid through the FIHS website at: <http://www.friendsihs.org/index.html>.

Finally, I want to thank all of our members who have donated their

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time and effort for the benefit of the Israel Heart Society. Please remember that our members are encouraged to send in news – personal and/or professional – to include in our **FIHS Heart Beats** section.

Thank you for your continued support!

Once again, best wishes for a happy and healthy new year,

Jeff Goldberger, M.D.

President, Friends of the Israel Heart Society



Two Presidents- Peres and Goldberger



The Richard, Hilda and Ezra Meltzer Memorial Award Winners 2006-2013

The Richard, Hilda and Ezra Meltzer Memorial Award was established through the Friends of the Israel Heart Society in 2006 thanks to the generous support of the Meltzer family. Each year, an Israeli cardiologist who has distinguished his/herself in cardiology research is awarded a grant to further his/her research.

The 2013 winner was Dr. Jonathan Lessick Cardiology Department, Rambam Medical Center, Haifa for his contribution to the field of cardiac CT. The research spans a period of

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several years from 2005 to the present and deals with the use of cardiac CT in the comprehensive analysis of the cardiac patient, over a wide spectrum of conditions.



Dr. Lessick on left, Hilda Ezra Meltzer on right.



Meetings

Innovations in Cardiovascular Interventions (ICI) Meeting

<http://icimeeting.com>

December 1-3, 2013

Tel Aviv, Israel

David Intercontinental Hotel,

Tel Aviv, Israel

ICI Faculty-

<http://icimeeting.com/ici-faculty/>

The 12th International Dead Sea Symposium (IDSS) on Innovations in Cardiac Arrhythmia and Device Therapy

March 3-5, 2014

Hilton Convention Center,
Tel Aviv, Israel

<http://www.idss-ep.com>

Main Topics:

- Innovations in Cardiac Implantable Devices
- Innovations in Ablation Techniques
- Innovations in Imaging and Navigation Techniques
- Innovations in Non-Invasive Electrophysiology
- Stroke Prevention: Newest Approaches
- Wireless Device Diagnostics and Therapeutics
- New Implanted Devices (leadless, epicardial, subQ, etc)
- Remote Monitoring of Implanted Devices
- Cell-Based and Stem Cell Therapy
- Sudden Cardiac Death
- Atrial Fibrillation
- CHF
- Clinical Trials
- Controversy
- Entrepreneurship in Electrophysiology

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The 61st Annual Conference of
the Israel Heart Society in
Association with the Israel
Society of Cardiothoracic
Surgery

April 30- May 1, 2014 (never too
early to start planning!).

David Intercontinental Hotel,
Tel Aviv

<http://israelheart.com/>

Guest Lecturers

Dominick J. Angiolillo

University of Florida College of
Medicine-Jacksonville, Jacksonville,
FL, USA

Jeroen J. Bax

Vice-President, European Society of
Cardiology, Leiden University Medical
Center, Leiden, The Netherlands

Peter Ganz

San Francisco General Hospital, San
Francisco, CA, USA

Philip Greenland

Northwestern University Feinberg
School of Medicine, Chicago, IL, USA

Thomas F. Lüscher,

Editor-in-Chief, European Heart
Journal, University Hospital Zurich,
Zurich, Switzerland

Patrick T. O’Gara,

President – Elect, American College of
Cardiology

Brigham and Women's Hospital
(BWH), Boston, MA, USA

Alec Vahanian

Bichat University Hospital, Paris,
France

Ronald G. Schwartz

University of Rochester Medical
Center, Rochester, NY, USA

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Panos E. Vardas

President, European Society of
Cardiology

Heraklion University Hospital,
Heraklion, Greece

**Guest Speaker of Cardiothoracic
Surgery**

TBA

Deadline for abstract submission:
December 22, 2013. The link is:

<https://events.eventact.com/runAbstracts/agenda/AgendaWelcome.aspx?Company=75&Event=11782&Lang=en>

Batia also wants me to mention that the Israel Heart Society will have a booth (manned by Batia) at the European Society of Cardiology in Amsterdam August 31- September 3. The booth will be in the National Cardiac Societies area, ESC Plaza, booth 220D. Drop by to dip some apple (from Amsterdam) in honey (from Israel)!



Heart-warming Story

Wolfson Heart surgeons save Syrian girl

by Judy Siegel-Itzkovich
5/14/13

Doctors at Holon Hospital perform successful open-heart surgery on Syrian pre-schooler as part of Save a Child's Heart.

A four-year-old girl from Syria underwent successful lifesaving heart surgery at Wolfson Medical Center in Holon on Monday, as part of its voluntary Save a Child's Heart activities.

The child, whose identity is not being released to keep the family safe from extremists in her country, was referred to SACH by an American humanitarian organization operating in Israel and Jordan.

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SACH, founded by the late pediatric heart surgeon Dr. Amiram Cohen, has treated more than 3,000 children from 44 developing nations. On Monday, Syria became the 45th country.

The girl was brought here last week from Jordan where she and her mother were living as refugees of the current Syrian civil war.

Upon her arrival, the girl was examined by the SACH medical team, who decided that she would undergo open-heart surgery as soon as possible – all of it free and supplied by volunteer medical staffers and raised funds. The procedure was performed at Wolfson Medical Center in Holon. She is now recovering in the hospital's pediatric intensive care unit.

According to the child's mother, doctors in Syria discovered the girl's heart condition when the child was six months old, but proper medical care was not available.

"We kept taking her to doctors but nothing could be done for her," the mother said. "She couldn't run and play like other children, and she was very sick most of the time." After the operations the mother said that the doctors had treated them very well. She met other SACH

patients and their families at Wolfson– many of them Palestinian and Arabic speaking.

<http://www.jpost.com/Health-and-Science/Wolfson-heart-surgeons-save-Syrian-girl-313122>



Membership

This is also a reminder regarding membership dues for the Friends of the Israel Heart Society. The basic dues are **\$50**. You can register through our website <http://friendsihs.org/Register.html> or send a check directly to:

Friends of the Israel Heart Society
8626 Central Park
Skokie, IL 60076

FIHS is on the web at <http://friendsihs.org/index.html>.

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Please include your email address to assure you do not miss an issue!

We are particularly grateful to those who can be sponsors at any one of the levels indicated below so that we may continue and increase our support of creating a bridge between Israeli Cardiology and the rest of the World:

\$250 Silver member

\$500 Gold member

\$1,000 Platinum member

\$5,000 President's Club

Your support enables us to continue growing our programs, including the ACC meeting, support for Israeli fellows to attend the AHA/ACC meetings, and to grow other programs.

For those who are interested in directed donations, we have the following opportunities:

\$500 Sponsor an issue of the FIHS newsletter

\$1000 Partial sponsorship of an Israeli fellow to attend the AHA meeting

\$1000 Partial sponsorship of an Israeli fellow to attend the ACC meeting

\$2500 Sponsorship of an Israeli fellow to attend the AHA meeting

\$2500 Sponsorship of an Israeli fellow to attend the ACC meeting

We would like to thank our Platinum, Gold, and Silver Members for their past and future support! Thanks to all!

Research

Should Bilateral Internal Thoracic Artery Grafting Be Used in Elderly Patients Undergoing Coronary Artery Bypass Grafting?

Benjamin Medalion, MD;
Rephael Mohr, MD; Osnat Frid, MD; Gideon Uretzky, MD; Nachum Nesher, MD; Yosef Paz, MD; Amir Kramer, MD; Dmitry Pevni, MD

From the Department of Cardiothoracic Surgery, Rabin Medical Center, Petah Tikva, Israel (B.M.); Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel (B.M., R.M., O.F., G.U., N.N., Y.P., A.K., D.P.); and Department of Cardiothoracic Surgery, Tel Aviv Sourasky Medical Center, Tel Aviv, Israel (R.M.,

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O.F., G.U., N.N., Y.P., A.K., D.P.).

Correspondence to Rephael Mohr, MD,
Department of Cardiothoracic Surgery, Tel
Aviv Sourasky Medical Center, 6 Weizman
St, Tel Aviv 64239, Israel. E-mail
<mailto:marion@tasmc.health.gov.il>

Background—Although bilateral internal thoracic artery grafting is associated with improved survival, the use of this technique in the elderly is controversial because of their increased surgical risk and shorter life expectancy. The purpose of this study was to evaluate the effect of age on outcome of patients undergoing bilateral internal thoracic artery grafting.

Methods and Results—Between 1996 and 2001, 1714 consecutive patients underwent skeletonized bilateral internal thoracic artery grafting, of whom 748 were ≤ 65 years of age, 688 were between 65 and 75 years of age, and 278 were ≥ 75 years of age. Operative mortality of the 3 age groups (1.2%, 4.1%, and 5.8%, respectively) was lower than the logistic EuroSCORE predicted mortality (3.9%, 6.5%, and 9.3%, respectively; $P < 0.001$). There were no significant differences among the groups in occurrence of sternal infection (1.3%, 2.6%, and 1.4%, respectively; $P = 0.171$). Mean follow-

up was 11.5 years. Kaplan–Meier 10-year survival for patients ≤ 65 , 65 to 75, and > 75 years of age was 85%, 65%, and 40%, respectively ($P < 0.001$). These rates were better than the corresponding predicted Charlson Comorbidity Index survival rates (68%, 37%, and 20%, respectively; $P < 0.001$ for all age groups), approaching survival of the sex- and age-matched general population (90%, 70%, and 41%, respectively). Age ≤ 65 years (hazard ratio, 0.232; 95% confidence interval, 0.188–0.288) and age 65 to 75 years (hazard ratio, 0.499; 95% confidence interval, 0.414–0.602) were independent predictors of improved survival (Cox model).

Conclusions—Bilateral internal thoracic artery grafting should be considered in patients > 65 years of age because of the significant survival benefit obtained with this surgical technique with no additional risk of sternal wound infection related to age. (*Circulation*. 2013;127:2186-2193.)

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Table 1. Charlson Comorbidity Index

Assigned Weights for Diseases	Conditions
1	Myocardial infarction
1	Congestive heart failure
1	Peripheral vascular disease
1	Cerebrovascular disease
1	Dementia
1	Chronic pulmonary disease
1	Connective tissue disease
1	Ulcer disease
1	Mild liver disease
1	Diabetes mellitus
2	Hemiplegia
2	Moderate or severe renal disease
2	Diabetes mellitus with end-organ damage
2	Any tumor
2	Leukemia
2	Lymphoma
3	Moderate or severe liver disease
6	Metastatic solid tumor
6	AIDS

Assigned weights for each condition that a patient has. The total equals the score. Example: Chronic pulmonary disease (1) and lymphoma (2)=total score (3).

Table 6. Independent Predictors of Overall Mortality

	Hazard Ratio (95% CI)	P Value
Age, y		
≤65	0.236 (0.191–0.299)	<0.001
65–75	0.503 (0.417–0.606)	
Diabetes mellitus	1.526 (1.317–1.811)	<0.001
Chronic obstructive pulmonary disease	1.652 (1.333–2.288)	0.037
Congestive heart failure	1.834 (1.449–2.212)	<0.001
Chronic renal failure	1.360 (1.067–1.731)	0.031
Peripheral vascular disease	1.801 (1.538–2.114)	<0.001
Intra-aortic balloon pump	1.626 (1.074–1.980)	0.001
Redo procedure	1.623 (1.076–2.445)	0.021
Ejection fraction ≤25%	2.132 (1.201–3.021)	0.001
Early period	1.351 (1.101–1.658)	0.004

Table 5. Morbidity and Mortality by Age Group

Factor	Total	Age <65 y	Age 65–75 y	Age >75 y	P Value
30-Day mortality	53 (3.1)	9 (1.2)	28 (4.1)	16 (5.8)	<0.001
Deep sternal infection	32 (1.9)	10 (1.3)	18 (2.6)	4 (1.4)	0.171
Postoperative CVA	53 (3.1)	12 (1.6)	31 (4.3)	10 (3.6)	0.006
Postoperative MI	18 (1.1)	5 (0.7)	9 (1.3)	4 (1.4)	0.387
3-Year actuarial survival, %	93±10	95±7	88±12	77±25	0.001
5-Year actuarial survival, %	88±10	94±9	81±15	69±28	<0.001
10-Year actuarial survival, %	70±10	84±13	65±18	40±30	<0.001
CCI 10-year predicted survival, %	48±8	69±10	38±10	20±10	<0.001

Values are n (%), or mean±SD.
CCI indicates Charlson Comorbidity Index; CVA, cerebrovascular accident; and MI, myocardial infarction.

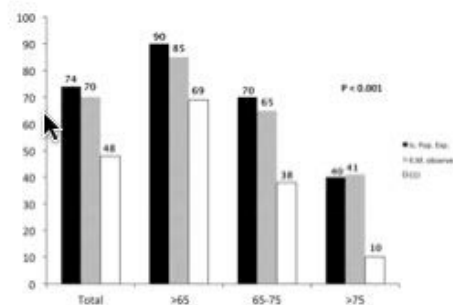


Figure 1. Kaplan-Meier survival and expected survival without operation (Israeli population and Charlson Comorbidity Index). CCI indicates Charlson Comorbidity Index; Is. Pop., expected survival for Israeli population; and K.M., Kaplan-Meier.

Research #2

A general three-dimensional parametric geometry of the native aortic valve and root for biomechanical modeling

Journal of Biomechanics 45 (2012) 2392–2397

Rami Haj-Ali ^{a,b,n,1}, Gil Marom ^{a,1}, Sagit Ben Zekry ^c, Moshe Rosenfeld ^a, Ehud Raanani ^d

^a School of Mechanical Engineering, Faculty of Engineering, Tel Aviv University, Tel Aviv, Israel^b College of Engineering, Georgia Institute of Technology, Atlanta, GA, USA^c Echocardiography Laboratory, Cardiology Department, Chaim Sheba Medical Center, Tel Hashomer, Israel^d Department of Cardiothoracic Surgery, Chaim Sheba Medical Center,

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Tel Hashomer, Israel

The complex three-dimensional (3D) geometry of the native tricuspid aortic valve (AV) is represented by select parametric curves allowing for a general construction and representation of the 3D-AV structure including the cusps, commissures and sinuses. The proposed general mathematical description is performed by using three independent parametric curves, two for the cusp and one for the sinuses. These curves are used to generate different surfaces that form the structure of the AV. Additional dependent curves are also generated and utilized in this process, such as the joint curve between the cusps and the sinuses. The model's feasibility to generate patient-specific parametric geometry is examined against 3D-transesophageal echocardiogram (3D-TEE) measurements from a non-pathological AV. Computational finite-element (FE) mesh can then be easily constructed from these surfaces. Examples are given for constructing several 3D-AV geometries by estimating the needed parameters from echocardiographic measurements. The average distance (error) between the calculated geometry and the 3D-TEE measurements was only 0.7870.63 mm. The proposed general 3D parametric method is very effective in quantitatively representing a wide range of native AV structures, with and without pathology. It can also facilitate a methodical quantitative investigation over the effect of pathology and mechanical loading on these major AV parameters.

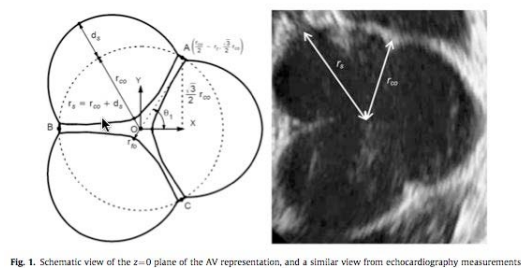


Fig. 1. Schematic view of the $z=0$ plane of the AV representation, and a similar view from echocardiography measurements.

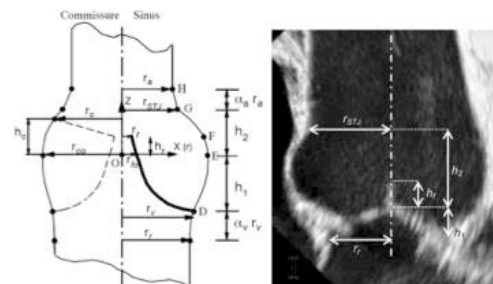


Fig. 3. Schematic longitudinal ($y=0$) section of the AV representation.

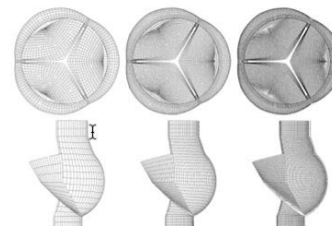


Fig. 5. Healthy model of the AV using the same geometrical parameters with different mesh refinements. Top views of the entire valve and root (first row) and side views of the valve and root (second row).

Research #3

Pacing Clin Electrophysiol. 2013 Apr 17.
doi: 10.1111/pace.12136.

Cardiac Resynchronization Therapy in Patients with Atrial Fibrillation: A 2-Year Follow-Up Study.

Eisen A, Nevzorov R, Goldenberg G, Kuznitz H, Porter A, Golovtznin G, Strasberg B, Haim M.

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From the Cardiac Electrophysiology and Pacing Unit, Cardiology Department, Rabin Medical Center, Petah Tikva and Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel.

<http://www.ncbi.nlm.nih.gov/pubmed/23594360>

Abstract

INTRODUCTION:

Atrial fibrillation (AF) is the most common arrhythmia in patients with heart failure (HF) and represents an important comorbidity in these patients. Cardiac resynchronization therapy (CRT) has been shown to be beneficial in patients with HF. Whether patients with AF benefit similarly from CRT as their counterparts in sinus rhythm is controversial.

METHODS AND RESULTS:

We conducted a cohort analysis of 175 patients (138 men; age range 57-79 years) who underwent CRT implantation during 2004-2008 in our institution. AF was documented in 66 patients (37.7% of patients, 52 men). There were no differences in 1- or 2-year mortality between patients with and without AF (13.6% vs 11.79%, $P = 0.7$; 25.8% vs 16.9%, $P = 0.2$, respectively). There were no

differences between the groups in the rate of complications after CRT implantation or in the rate of appropriate electrical shocks. In the subgroup of AF patients with cardiac resynchronization therapy defibrillator (CRT-D) ($n = 32$, 48.5%), the 1-year mortality was 3.1% as compared to 23.5% in AF patients with cardiac resynchronization therapy pacemaker ($P = 0.03$). This difference was no longer evident after 2 years (25.0% vs 26.5%, $P = 0.8$, respectively). Ten patients (15.2%) with AF underwent atrioventricular (AV) node ablation. The 2-year mortality of these patients was 10.0% as compared to 28.6% in AF patients who did not undergo AV-node ablation ($P = 0.4$).

CONCLUSIONS:

In this study, no difference in mortality appears to exist between patients with or without AF and who undergo CRT implantation. Our findings of the beneficial effects of AV-node ablation and CRT-D in AF patients deserve further investigation.

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J Card Surg. 2013 Mar;28(2):89-96. doi: 10.1111/jocs.12051.
Epub 2013 Jan 7.

Mitral valve repair: isolated posterior compared to anterior or bileaflet pathology.

J Card Surg. 2013 Mar;28(2):89-96.

Spiegelstein D, Sternik L, Orlov B, Shinfeld A, Feinberg MS, Malachy A, Raanani E.

Department of Cardiac Surgery, Chaim Sheba Medical Center, Tel-Hashomer, Ramat-Gan, Israel, Affiliated to the Sackler School of Medicine, Tel-Aviv University, Tel-Aviv, Israel.

<http://www.ncbi.nlm.nih.gov/pubmed/23294452>

Abstract: The results of mitral valve (MV) repair for anterior leaflet pathology (ALP) are considered less favorable than those for posterior leaflet pathology (PLP). We compared clinical and echocardiography outcomes of PLP repair with ALP and/or bileaflet pathology (BLP) repair.

Methods: Between 2004 and

2011, 407 patients underwent MV repair due to degenerative MV: 276 patients (68%) had PLP and 131 (32%) had ALP/BLP. Mean age was 59 ± 12 and 56 ± 15 years in PLP and ALP/BLP groups, respectively ($p = 0.03$). Patient characteristics and comorbidities were similar between groups. Valve repair techniques included leaflet resection (61% and 24%), annuloplasty (99% and 97%), and artificial chordae (46% and 67%), in the PLP and ALP/BLP groups, respectively. **RESULTS:** There was one (0.4%) in-hospital death in the PLP group, and none in the ALP/BLP group. Early complication rate was similar between groups. Completed clinical and late echocardiography follow-up was 95% (29 ± 22 months, 1 to 87). Freedom from reoperation was 98% (270/276) and 98% (129/131), and there were three (1%) and three (2%) late deaths, in the PLP and ALP/BLP groups, respectively (NS). Late echocardiography revealed that 89% and 94% of patients (PLP

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and ALP/BLP groups, respectively) were free from moderate or severe mitral regurgitation (MR) ($p = 0.13$). All other late valve-related complications were similar between groups.

Conclusions: Anterior and bileaflet MV disease can be repaired with early and mid-term results similar to those of posterior MV disease. All patients with severe MR due to anterior or posterior pathology should be considered equally for early valve repair.



New Products



A prototype of the Oxitone device, heading to market in about 18 months.

A 'watch' that stops unnecessary heart attack deaths

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OF THE ISRAEL HEART SOCIETY

Posted By Karin Kloosterman

On May 22, 2013 @ 12:31 am

About half of all people at risk of death from heart attacks could gain the chance to live, once Israeli entrepreneur Leon Eisen's new **Oxitone** device goes to market in about 18 months.

Using two optical sensors, and another special high-tech tool, he's developed the world's first "watch" that can just about tell when your time may be up.

It's no joke: Oxitone was developed to cheat fate.

Eisen tells ISRAEL21c that about half of the people who die from cardiac or pulmonary arrest would be alive if someone had been there to get them to the hospital in time. Oxitone is made to be worn on the wrist to provide a heads-up for someone to get medical assistance on their own, before it's too late.

With all the technology out there — personal monitoring devices, crocodile clips for your finger, even those panic buttons — nothing helps if the user is

not able to mobilize these devices in time. And many patients may not be able to read the signs that cardiac arrest is imminent.

That's why Eisen developed a wearable watch-like mobile device -- synched with Bluetooth, Android or iPhone devices -- that takes minute-by-minute readings of heart rate and oxygen levels in the blood.

So potentially "disruptive" is this advance that Oxitone recently was chosen from 400 applicants to be among 13 companies – and the only Israeli one — in GE Healthcare's Start-Up Health Academy Entrepreneurship Program. The three-year program provides healthcare entrepreneurs the tools to propel their product into the healthcare market.

Pain-free, always on duty

"Oxitone takes the pinch out; it's worn on the wrist instead of the fingertip to provide continuous, wireless non-stop monitoring while you are walking, eating, sleeping or doing sports," Eisen says.

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Blood-oxygen levels are a critical parameter in monitoring COPD (chronic obstructive pulmonary disease), which can prevent patients from getting enough air into their lungs.

COPD also accompanies chronic bronchitis, asthma and emphysema, leading to shortness of breath. It is estimated that COPD is the third-highest cause of death in the United States.

Oxitone non-invasively determines if a cardiac event is imminent by following blood-oxygen levels. It may also help people who suffer from sleep apnea, giving peace of mind to the wearer and their loved ones.

When heart rates change and oxygen levels drop, Oxitone sends alerts to pre-determined locations. It can also be used for long-term care, as physicians can access ongoing records to see how a patient is doing over time.

"My product facilitates an early clinical response for cardiac or pulmonary attack," Eisen explains. "Because it is continuously monitoring, we can

provide an emergency alert. With our device, people will feel better because they understand they are protected. This is the breakthrough."

A telltale heart

Eisen is looking for a \$3 million investment and looks forward to starting clinical trials on the device in Israel and the UK. Early R&D trials have already been done, he says. There is also a working prototype in hand, but just how the final Oxitone will look is yet to be determined.

Eisen was trained originally as a physicist. The 46-year-old moved to Israel from Moscow in 1999 and obtained a doctorate from Israel's famed Weizmann Institute of Science. He then did a post-doc at Bar-Ilan University, where he learned about optical lasers. This work of several years enchanted him, and made him curious about applied sciences.

He started working as a freelancer, building various projects and sensors for high-tech companies.

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In 2010, Eisen joined Israel's startup nation culture by founding Oxitone, the name of the company as well as the device. The company is based in Ashkelon, inside the ATI incubator.

The "watch" will cost an estimated \$200, plus a monthly service fee depending on use.

<http://israel21c.org/health/a-watch-that-stops-unnecessary-heart-attack-deaths/>





FIHS at IHS 2013

The 60th Annual meeting of the Israel Heart Society took place in Jerusalem on April 22-23. As noted by keynote speaker and our own board member Eugene Braunwald, how amazing is it that a country that was celebrating its 65th anniversary could have the where-with-all to start a Heart Society just 5 years later!

There were 2 full days of sessions, including joint sessions and addresses from American College of Cardiology President John Gordon Harold and European Society of Cardiology President Panos Vardas.

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Here is a summary from the Jerusalem Post :

<http://www.jpost.com/Health-and-Science/Israeli-heart-innovations-hailed-at-Jlem-conference-310755>

Israeli heart innovations hailed at J'lem conference

By JUDY SIEGEL-ITZKOVICH
04/23/2013 04:12

Israel's major contributions to the treatment of cardiovascular disease commemorated in three just-issued postage stamps.



Prof. Chaim Lotan Photo: Courtesy of Hadassah.org

Israel's major contributions to the treatment of cardiovascular disease were hailed by participants of the 60th International Conference of the Israel Heart Society (IHS) on Monday, and are commemorated in three just-issued postage stamps featuring three Israeli cardiology innovations.

Some 1,300 cardiologists from here and abroad are attending the two-day conference at the Jerusalem International Convention Center.

Outgoing IHS president Prof. Chaim Lotan – who is director of the Hadassah University Medical Center's Heart Institute

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– and IHS secretary-general Dr. Amit Segev hosted the event.

Among the leading foreign guests are Prof. John Harold, president of the American College of Cardiology (ACC) and Prof. Panos Vardas, president of the European Society of Cardiology. Both organizations enjoy strong ties with the IHS.

The Philatelic Service's three new postage stamps were unveiled by its director, Yaron Razon. The stamp series presents a percutaneous (underskin) artificial heart valve; stents (metal mesh cylinders that release medication and hold open weak, damaged or collapsed coronary arteries); and an implanted defibrillator that electrically regulates a heartbeat.

Razon said the new stamp series is meant to increase Israeli awareness of the country's world-class achievements in combating heart disease.

As these stamps make their way abroad, they will also raise awareness of these around the world. The stamps cost NIS 3, NIS 4.20 and NIS 5.

At the conference, Lotan told the audience that the mortality rate from cardiovascular disease has dropped in recent decades by half, and that 90 percent of acute cardiovascular events are treated immediately with catheterization.

In the last four years, Lotan continued, some 1,500 artificial heart valves have been implanted via catheter to replace faulty ones in patients unsuited for open-heart surgery.

Cholesterol-lowering drugs are successfully reducing complications in large numbers of patients, Lotan said, noting that many patients fail to recognize the symptoms of cardiac infarction and don't get to hospitals in time.

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As heart attack symptoms are more difficult to identify in women than in men, the IHS is launching Go Red!, a program to increase awareness of symptoms among women and healthcare providers, Lotan said.

In an interview with *The Jerusalem Post*, the ACC's Harold described the growth of cardiac services in Israel as "nothing short of extraordinary."

Harold, a cardiologist at Cedar-Sinai Medical Center in California, said he has "trained many Israeli cardiologists, and I am amazed to meet here those in prestigious medical posts."

The ACC, founded the same year as the State of Israel, has 43,000 members (membership is granted only to cardiologists of the highest caliber) and an Israeli chapter with more than 30 fellows (FACC).

"Israeli cardiologists have great bench-to-bedside developments. Israel is one of

the safest parts of the world to have a heart attack," he smiled.

His organization also runs a "Middle East Conference" in California with cardiologists from countries in the region, including Iran, Egypt and Lebanon as well as Israel.

"They sit at the same table, and they don't discuss politics.

They discuss hearts," Harold said. "We wanted to show the world that cardiologists can transcend divisive issues and come together to benefit all."

Vardas, a Greek cardiologist, said that his group, established in 1949, has 55 chapters in Europe, and is based in Nice, France. The group will soon also have an office in Brussels. Vardas has come to Israel almost annually and is "extremely impressed by its medical innovation, vision and strong economy."

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Here are some pictures of our FIHS members and others at the 2 day affair, including pictures from a private audience with President of Israel, Shimon Peres.



Doug Zipes presenting Shimon Peres his latest book "Ripples in Opperman's Pond" with Eugene Braunwald approving!



Presidents Chaim Lotan and Shimon Peres



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Samuel Goldhaber



Incoming IHS President Yoseph Rozenman



FIHS Founding President Doug Zipes and
current President Jeff Goldberger



Eugene Braunwald, Robert Levine, Ronen
Beeri



IHS Sec. General Amit Segev & Pres. Chaim
Lotan



ACC President John G. Harold and Yzhar
Charuzi

FIHS is on the web at <http://friendsihs.org/index.html>.

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Jeff Goldberger and Jack Stroh



Amit Segev, John G. Harold, and Chaim Lotan



ESC President Panos Vardas, ACC President John G. Harold, ESC President-elect Fausto Pinto



Chaim Lotan, Eugene Braunwald, and Amit Segev

FIHS is on the web at <http://friendsihs.org/index.html>.

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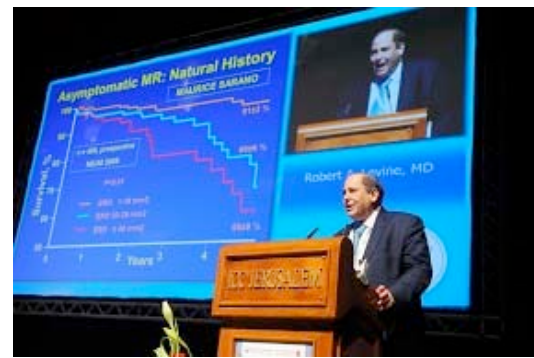
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Martin Leon



Robert Levine



Incoming IHS President Yoseph Rozenman



Douglas Zipes



Basil Lewis



Panos Vardas

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Giora Weisz

For more pictures of the meeting
go to:

<http://www.israel-heart.org.il/צוות-60-ה-מכנס-התמונות-אלבום-1420/חדשות/רפואי-הקרדיולוגי-האיגוד-של>

Highlighting Joint Programs

This section highlights ongoing Interchange Programs taking place at American sites. Thanks to Board member Richard Popp for directing this program and allowing us to publicize it:

Feldman Family Foundation Visiting Professors Program

**Stanford University School of
Medicine, Palo Alto, California,
USA**

Program Director: Richard L. Popp,
M.D.

Purpose: The aim of the professorship is to allow senior Israeli faculty physicians, in the mid-portion of their careers, to have sufficient time away from clinical duties to update their general skills and/or to acquire specialized knowledge that they will transmit to their colleagues and students on their return to Israel. Physicians from any field may apply. Each visiting professor will have a program tailored to his or her needs by the Program Director and a collaborating Stanford Faculty sponsor, who will ensure the quality of the visiting professor's day-to-day activities. The experience of living in the United States for 6 months is an additional aspect of the program. If you are a faculty member of an Israeli Medical School please contact Dr. Popp at rich.popp@gmail.com and he will give you the contact person's name at your program.

I would also encourage Israeli programs to let our membership know about happenings and offers for training in Israel: Please email these to me at jackstroh@usa.net.

FIHS is on the web at <http://friendsihs.org/index.html>.

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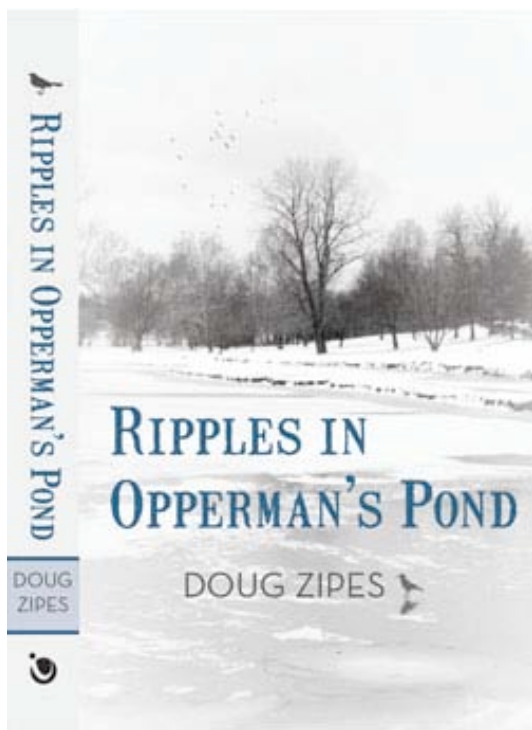
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FIHS Heart Beats



Hot off the presses from
Founding President Doug Zipes-



RIPPLES IN OPPERMAN'S POND

is a high-stakes thriller that explores the bonds of brotherhood and the innermost secrets of big-money medicine, where mistakes and lies cost thousands of lives and millions of dollars.

Told mainly in the first person by Daniel, it moves quickly from an Indianapolis hospital, to a Manhattan boardroom and then to a Russian research facility, culminating in a life-or-death decision the Sloane brothers never thought they'd have to make.

"The identical twins shared their toothpaste as children and their lives as adults. Daniel and Dorian Sloane have been saving each other since they skated on Opperman's Pond growing up. Daniel lost the coin toss to test the new winter ice and Dorian saved him from drowning. Twelve minutes' seniority put Dorian at the head of the multi-national Sloane Pharmaceuticals, while Daniel forged his own career as a gifted and innovative cardiologist. Redex, a miracle arthritis drug, brings the brothers together to heal an NBA legend – and make a few billion along the way, necessary to save the company losing patents on three

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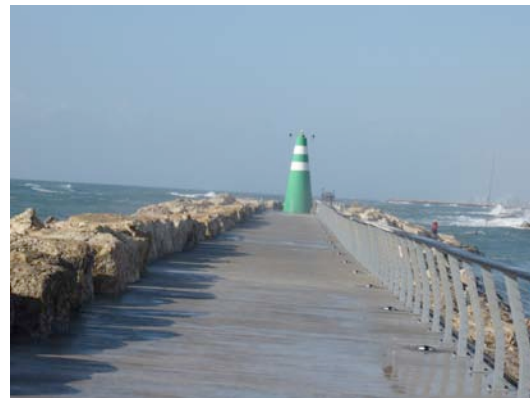
blockbuster drugs. The drug returns the Indiana Pacers star to full glory but his sudden death threatens to destroy Daniel's career, as he faces a devastating malpractice suit, the possible loss of his medical license, and even a voodoo curse by the athlete's widow."

Even Shimon Peres, President of Israel, is reading it!



Have any ideas to make this a better tool for our Society? Share them with us!

Tell your friends that we want them to join our mission to be a bridge between Israeli Cardiology and the world. If you have any questions, comment, criticisms (my favorites!) please email me at jackstroh@usa.net.



That's it for this issue of the newsletter of the Friends of Israel Heart Society. Special thanks as always to Mort Lebowitz MD and Batia Ziv for being our "eyes and ears on the ground" in Israel. Special thanks in America to our new Society Administrators- Janice and Larry Brown, welcome!

