A 45-year-old man was making plans to fulfill his lifelong dream of climbing the Himalayas and sought medical advice from Dr. David Hsi, Chief of Cardiology and Co-Director of Stamford Hospital’s Heart & Vascular Institute (HVI). The active gentleman, who was also a physician, had a history of hypertension, high cholesterol and abnormal echocardiogram (ECG) and was concerned about the risk that such a rigorous, high-altitude exertion may have on his heart. Dr. Hsi, who at the time was Chair of the Department of Cardiology at the Deborah Heart and Lung Center in New Jersey, performed a comprehensive sports cardiac evaluation and considered the patient’s heart able to handle the climb. Subsequently, the patient summited the Himalayas without any cardiac events.

Sports cardiology addresses the unique physiology and needs of active persons of all ages and fitness levels, a concept that perfectly dovetails with the HVI’s commitment to providing individualized, patient-centered care. “A very viable segment of the population wants to participate in sports to maintain a healthy lifestyle,” said Dr. Hsi. “Our goal is to help patients select appropriate sports and fitness activities and to identify those patients who may be at risk for cardiac events.”

“One hotly debated issue in sports cardiology is which patient populations should be referred for cardiac screening,” said Dr. Hsi. “The European literature suggests that all athletes and young healthy adults be screened, but in the United States there is less support for screening in these populations. Although it’s difficult to prove the efficacy of screening, it is usually recommended that adult patients be evaluated by their primary care physicians for the appropriate type of exercise programs.”

“I consider it prudent to perform cardiac screenings that include ECG on most at-risk adults who want to exercise,” Dr. Hsi continued. “Cardiac screenings can identify and prevent heart problems before they become serious and can unmask problems that haven’t surfaced yet.”

Many healthy adults who participate in endurance sports such as long-distance running, cycling, rowing and swimming develop Athlete’s Heart Syndrome, cardiac remodeling in response to vigorous endurance exercise. Exercise-induced cardiac remodeling can also cause arrhythmias such as atrial fibrillation in currently or previously trained athletes. “One elegant MRI-based study demonstrated balanced, biventricular enlargement among endurance athletes,” said Dr. Hsi.1 “For patients who present with these findings it is critically important to distinguish extreme cases of exercise-induced ventricular remodeling from mild forms of hypertrophic cardiomyopathy, familial or acquired dilated cardiomyopathy and arrhythmogenic right ventricular cardiomyopathy.”

Another study concluded that “markedly abnormal ECGs in young and apparently healthy athletes may represent the initial expression of underlying cardiomyopathies that may not be evident until many years later and that may ultimately be associated with adverse outcomes.”

“Sports cardiologists have an obligation to reassure people at low risk for cardiac disease that they avoid excessive testing and provide guidance to high-risk patients to prevent serious cardiac events,” said Dr. Hsi. “As a general rule, adults with known health risks should be screened before they begin exercising. Adults who want to participate in certain sports such as marathon running, scuba diving and high-altitude mountain climbing should undergo the appropriate sports-specific pre-screening evaluations.”

From The: Editor

I am pleased to present the Spring 2015 issue of The Pulse, the physicians’ quarterly newsletter of Stamford Hospital’s Heart & Vascular Institute (HVI). This issue features sports cardiology, an emerging subspecialty that addresses the cardiovascular effects and risks of exercise. At the HVI we are dedicated to providing cardiology services to all individuals who embrace an active lifestyle, from athletes to “weekend warriors” to patients recovering from cardiovascular disease so they may safely pursue their sports and exercise activities.

We are also proud to highlight the Hands for Life® Program spearheaded by Interventional Cardiologist Dr. Thomas Nero who, with a team of passionate Stamford Hospital physicians, is galvanizing the community to learn Hands-Only™ CPR.

Our hope is that this issue of The Pulse provides valuable information and insights that will enhance your clinical practice. I invite you to read on about our news and services and encourage you to provide your feedback and suggestions to make this newsletter a valued resource to physicians in our community.

— Joonun (Chris) Choi, MD
The Heart Physicians
Stamford Health Integrated Practices
JChoi001@stamhealth.org

Sports Cardiology Screening Guidelines

The American Heart Association’s 12-Point Screening Procedure

Personal medical history
1. Exertional chest pain/discomfort
2. Syncope/near syncope
3. Unexplained excessive exertional dyspnea or fatigue
4. Prior recognition of a heart murmur
5. Elevated blood pressure

Family medical history
6. Premature death related to cardiovascular disease
7. Disability from cardiovascular disease at age <50 years
8. Hypertrophic cardiomyopathy, dilated cardiomyopathy, Marfan syndrome, arrhythmias, channelopathy (Long QT syndrome)

Physical examination
9. Heart murmur
10. Femoral vs. radial pulses to exclude aortic coarctation
11. Physical stigmata of Marfan syndrome
12. Brachial artery blood pressure

Sports Cardiology Recommendations by Dr. David Hsi, Chief of Cardiology and Co-Director of the Heart & Vascular Institute

Contraindications to High-Intensity Competitive Sports (e.g. football, basketball, soccer)
• Left ventricular ejection fraction <50%
• Exercise-induced tachyarrhythmias

• Exercise-induced hypotension
• Exercise-induced myocardial ischemia
• Syncope
• More than moderately severe valvular disease
• Prior embolic event

Symptoms and Clinical Signs in Young Athletes that Should Raise Concern and Initiate Referral to a Sports Cardiologist
• Chest pain or discomfort on exertion
• Unexplained syncope or near syncope during exertion
• Dyspnea that is disproportional to the amount of exercise being performed
• Palpitations associated with any of the above
• A family history of hereditary cardiac disorder or sudden cardiac death in a first degree relative when young (<40 years)
• Suspicions for Marfan syndrome
• Left parasternal, systolic heart murmur that increases in intensity when standing or with Valsalva maneuver
• Electrocardiographic abnormalities
• Athletes with clinical symptoms and signs of an infection (e.g., flu-like symptoms) should be advised against intense exercise until they have made a complete recovery to avoid the risk of myocarditis
• Special consideration should be made regarding scuba diving for patients with certain conditions such as atrial septal defect, patent foramen ovale or other intra-cardiac shunts

A Fond Farewell to Peggy Martino, RN, MSN, MBA

The staff and physicians at the Heart and Vascular Institute (HVI) wish a fond farewell to Peggy Martino, Director of the HVI, Integrative Medicine and Population Health and Prevention at Stamford Hospital. Peggy has accepted the position of Vice President of Nursing for the NewYork-Presbyterian Healthcare System.

Peggy was instrumental in expanding the scope and breadth of HVI services including the addition of Preventive Cardiology; an Advanced (EP) Arrhythmia Center with the latest bi-plane system that offers the hybrid convergent procedure known for treatment of persistent atrial fibrillation; a hybrid OR to support state-of-the-art cardiac and vascular procedures; a new Structural Heart Disease program; and a successful Valve Center, which utilizes a multidisciplinary Heart Team approach in the evaluation of patients with valve disease. This spring, the HVI will offer the TAVR (transcatheter aortic valve replacement) procedure, an alternative for patients at high risk for traditional open-heart surgery.

A longtime champion of the Planetree model of patient-centered care, Peggy has been instrumental in creating an environment at the HVI in which patients and their families feel empowered to be partners in their own healthcare. This has led to exceptional quality outcomes and patient satisfaction.
Since 2008 Dr. Thomas Nero has directed the Hands for Life® program with far-reaching success, resulting in higher patient survival rates and an ever-expanding community of people who know how to save lives. Now, they are expanding the program to create even more community lifesavers.

"Only 25% of patients in cardiac arrest receive CPR at the time that first responders arrive, and every minute that treatment is delayed increases mortality by 10%," said Dr. Nero, Interventional Cardiologist at Stamford Hospital. "If more people knew how to provide effective, simple-to-apply Hands-Only™ CPR, more victims could be helped, instantly doubling their chances of survival."

According to the American Heart Association (AHA), 70% of Americans feel helpless to act during a cardiac emergency because they do not know how to administer CPR or are afraid of hurting the victim. The goal of the Hands for Life® program is to teach people that they can rescue a person in cardiac arrest by knowing how to Check, Call and Compress — check for breathing, call 911 and administer chest compressions at 100 beats per minute. The program teaches Hands-Only™ CPR without mouth-to-mouth resuscitation and how to use an automated external defibrillator (AED).

To date, the Hands for Life® program has trained over 10,000 people. In 2012 Dr. Nero and the Hands for Life® team broke the world record when they trained 5,141 people in CPR and the use of an AED in a single day.

"After that event we saw a modest increase in the use of CPR and in survival rates," said Dr. Nero. "However, we know we can do better."

To that end, Dr. Nero and a steering committee comprised of members of the City of Stamford's government, education, business and medical communities are planning a Hands for Life® training event at Westhill High School in Stamford on Saturday, September 26, 2015, with the ambitious goal of training 15,000 people including the high school’s students, faculty and staff. The committee has launched a communications campaign to elicit widespread community participation.

Physicians can play a vital role in convincing their patients to learn CPR. "Most people know that CPR is a good thing, but few actually make the effort to learn it," said Dr. Robert Labarre, Cardiologist at Stamford Hospital. "When a physician tells a patient that he or she should learn CPR, the message is delivered with a high level of trust and credibility, which goes a long way."

Dr. Labarre is a member of the Hands for Life® physician outreach committee at Stamford Hospital along with Dr. David Hsi, Chief of Cardiology at Stamford Hospital, Dr. Michael Coady, Chief of Cardiac Surgery at Stamford Hospital and President of the Fairfield County chapter of the AHA, and Dr. Henry Yoon, Family Practitioner at Stamford Hospital.

"We need to explain to our patients that CPR does more than save lives," said Dr. Hsi. "Early resuscitation can minimize neural injury and reduce complications from cardiac arrest, thereby improving the victim's quality of life."

Dr. Nero hopes physicians in the Fairfield County will volunteer at the event and encourage their patients, friends and family members to participate. "I brought my husband and two kids to the last event and we had a wonderful time," said Dr. Ann Williams, Family Practitioner at Stamford Hospital. "It was a huge bonding experience for the entire community."

A new, high-tech feature at the upcoming event is PulsePoint Respond, a mobile phone app that reduces collapse-to-CPR times by alerting citizens trained in CPR that they are in the vicinity of a person in cardiac arrest. The app also directs rescuers to the exact location of the closest AED. "There's also a fun game portion of the app that enables you to 'geotag' a defibrillator when you see one," said Dr. Nero. CPR trainees will have the opportunity to load the app onto their phones at the event.

For more information, visit the website at: www.HandsForLife.org To volunteer for the event or if you have any questions please contact Jami Sherwood at 203.667.3500 or info@handsforlife.org.
As Cause Sponsor of the American Heart Association (AHA) Go Red For Women® campaign, Stamford Hospital is co-hosting the 2015 Westchester-Fairfield Go Red for Women® Luncheon on Thursday, May 7 with Keynote Speaker Jane Condon, comedian and local Greenwich resident. Preceding the luncheon will be a Health & Wellness Exhibition where Stamford Hospital nurses will offer free health screenings and Learning Sessions led by Stamford Hospital physicians and staff.

Thursday, May 7, 2015
9:30 a.m. to 2 p.m.
Stamford Marriott
243 Tresser Blvd., Stamford, CT

Session I: 10 a.m. to 11 a.m. — Breaking Barriers in Heart Disease
Panel discussion about the new Prevention Guidelines on Heart Disease in Women with Stamford Hospital physicians Dr. Michael A. Coady, Chief of Cardiac Surgery; Dr. Evelyn Cusack, Cardiologist; and Dr. Sandhya Dhruvakumar, Chief of Electrophysiology.

Session II: 11 a.m. to 11:30 a.m. — Cooking with Heart — Family Style
Preparation/cooking demo of healthy versions of summer family favorites with chefs Gavin Pritchard, Dietician-Chef, Population Health and Prevention at Stamford Hospital; and Hunter Zampa, youngest Food Network “Chopped” champion.

Session III: 11:30 a.m. to Noon — Stress Less For Your Heart
Learn stress reduction techniques in this interactive workshop with Dr. Jennifer Edythe Cohen, Fellow, Center for Integrative Medicine & Wellness, Stamford Hospital.

Go Red for Women Luncheon — Noon to 2 p.m.

For more information contact Deena Kaye at 914.640.3269 or deena.kaye@heart.org.

NEW LOCATIONS FOR THE HEART PHYSICIANS
In its continuing endeavor to bringing the best cardiac medical services to Fairfield County residents, The Heart Physicians, part of Stamford Health Integrated Practices (SHIP), has expanded to add two new satellite locations in Darien and New Canaan:

The Heart Physicians – Darien
1500 Post Road, 2nd Floor
Darien, CT 06820
203.276.4940

The Heart Physicians – New Canaan
161 Cherry Street
New Canaan, CT 06840
203.276.4301

HVI NEWS & ACHIEVEMENTS
Congratulations to our HVI physicians named Top Doctors™ by Castle Connolly Medical Ltd*:

Top Doctors in Cardiovascular Disease:
- Charles B. Augenbraun
- Joonun (Chris) Choi
- Evelyn J. Cusack
- Jeffrey A. Green
- Mark D. Heiman
- Steven F. Horowitz
- David J. Lomnitz
- Stephen P. Michaelson
- Francis J. Neeson
- Edward H. Schuster

Top Doctors in Thoracic and Cardiac Surgery:
- Michael A. Coady
- William C. Feng

Top Doctors in Cardiac Electrophysiology:
- Sandhya Dhruvakumar
- Michael R. Pittaro

Top Doctors in Interventional Cardiology:
- Robert D. Jumper
- Thomas J. Nero
- Edward L. Portnay
- Jared G. Selter

* This list contains all Stamford Hospital’s affiliated Top Doctors™ who have been selected to-date as Castle Connolly Top Doctors™. Castle Connolly’s Top Doctors™ are selected based on nominations by their peers and reviewed by Castle Connolly’s physician-directed research team.