ARRHYTHMIA UPDATES 2012

ACAP CARDIAC RESEARCH GROUP NEWSLETTER MAY 2012



A MAJOR GAP STILL EXISTS IN APPLYING GUIDELINES FOR PRIMARY PREVENTION OF SUDDEN CARDIAC DEATH AND UNDERUTILIZATION OF DEVICE IMPLANTATION

The ACAP Program at St. Luke's and Roosevelt Hospitals presented their latest research at the American College of Cardiology 61st Annual scientific session in Chicago last month. The research paper titled "A Major Gap Still Exists in Applying Published Guidelines for primary Prevention of Sudden Cardiac Death and Underutilization of Device Implantation; An ESCAPE Registry Analysis" aimed to evaluate the number of implanted devices in a cohort of eligible patients according to the guidelines, patient outcomes including all-cause mortality at 90 days and heart failure readmissions at 30 days, and identifying any differences among different race groups, sexes and overall event rates at 24 months.

This paper is relevant in lieu of the recent JAMA article of data extracted from the National Cardiovascular Data Registry (NCDR) revealed that there is deviations from the evidence-based guidelines for ICD implantation with an estimated 22.5% of these procedures did not meet the criteria. In our real life representation study we have shown astonishing results with only 19% of all eligible patients according to the AHA/ACC guideline receiving ICD implantation. Patient who received ICD had much better survival outcome than those who did not receive the evidence based therapy. In addition there were discrepancies among women and African American patients.

We concluded that this real world prospective study contradicts the recent published data of ICD overuse and reveals the significant gap and underutilization of ICD among eligible patients.

SCD claims more lives each year than lung cancer, breast cancer and AIDs combined claiming more than 335,000 lives annually.



ESCAPE SYMPOSIUM 2012 SPEAKERS DR. FAROOQ CHAUDHRY, DR. EYAL HERZOG, DR. ANDREW KRAHN, DR. EMAD AZIZ

SECOND ESCAPE PATHWAY SYMPOSIUM 2012

The ACAP Program at St. Luke's and Roosevelt Hospitals hosted the second Sudden Cardiac Death Symposium on 4/24/2012. The attendees ranged from nurses, nurse practitioners, housestaff, residents, fellows, hospitalists, and medicine and cardiology attendings. The lectures included 'The Role of the ACAP Program' (Emad Aziz, DO, MB CHB, FACC), 'The Role of Echo in Identifying Patients at Risk for Sudden Cardiac Death' (Faroog Chaudhry, MD, FACC, FASE), 'The ESCAPE Pathway, for Sudden Cardiac Death Prevention' (Eval Herzog, MD, FACC), and 'Genetic Predictors Related to Sudden Cardiac Death' (Andrew Krahn, MD, FACC). Dr. Andrew Krahn's lecture highlighted that the road is still in its beginning in identifying the genetics behind sudden cardiac death; "We only touched the peak of the iceberg when it comes to genetic predisposition and sudden cardiac death" said Dr. Krahn. For more information please visit our website www.NYCardiologyPathways.Org, or to obtain a DVD copy of the symposium, please email: Eaziz@Chpnet.org

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MAY, 2012



FDA APPROVES ALTERNATIVES TO WARFARIN — DABIGATRAN (PRADAXA) AND RIVAROXABAN (XARELTO) APPROVED FOR ATRIAL FIBRILLATION STROKE PREVENTION.

Since late 2010, two warfarin alternatives, dabigatran etexilate (Pradaxa) and rivaroxaban (Xarelto) have been approved by the U.S. Food and Drug Administration (FDA) for use in patients with atrial fibrillation. Patients taking the drugs don't need the regular blood checks required with warfarin, although there is a different set of tradeoffs, including the lack of an antidote to reverse bleeding, according to anticoagulation experts. Dabigatran and rivaroxaban offer promise as the first new oral anticoagulants in more than 50 years.

Large studies suggest that they are relatively safe and highly effective. Primary care clinicians as well as specialists will need to develop a familiarity with these drugs given their potential for hemorrhage, potential to interfere with perioperative management and the requirement for specific management in the case of overdose or bleeding.

Warfarin is, however, still a good choice for several subsets of patients and new patients should be able to participate actively in an informed decision on the type of anticoagulant treatment.

- Dabigatran 150mg = lower rates of strokes compared to warfarin BUT similar rates of hemorrhage.
- Rivaroxaban 20mg = similar rates of stroke and similar rates of bleeding to warfarin.

In the ATRIA study that was published in 2005 in Circulation researchers from California and Boston looked back at more than 13,000 AF patients. They found that females had a 60% greater risk of stroke. The enhanced risk occurred at all ages and held up after correction for confounding diseases. Reassuringly, they also found that warfarin reduced stroke risk equally in females and males



PRADAXA (DABIGATRAN)



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BOSTONSCIENTIFIC INCEPTA

Clinical Trials at St. Luke's-Roosevelt Hospitals

- **RAID** Late Sodium Current Blockade in High-Risk ICD Patients.
- Echo-CRT evaluate the effect of cardiac resynchronization therapy on mortality and morbidity of subjects with heart failure and narrow QRS width (<130 ms) and echocardiographic evidence of ventricular dyssynchrony.
- NAVISTAR THERMOCOOL Catheter for the Radiofrequency Ablation of Symptomatic Paroxysmal Atrial Fibrillation, post Approval Registry.
- AIGIS Anti-Bacterial Envelope for Prevention of Infection Following Cardiac Rhythm Management Device Replacement With a Cardiac Resynchronization Therapy Device.

To refer a patient for participation in a clinical trial, please contact our research nurse: *Ammy Malinay, RN, BSN by Phone: (212) 523-3281, or Email: aalburo@chpnet.org.*

BOSTON SCIENTIFIC RELEASES NEW FAMILY OF CARDIAC DEVICES THAT OFFERS EXCELLENT LONGEVITY AND INDUSTRY'S LONGEST WARRANTY.

Boston Scientific Corporation released three new devices INCEPTA[™], ENERGEN[™] and PUNCTUA[™] cardiac resynchronization therapy defibrillators (CRT-Ds) and Implantable Cardioverter Defibrillators (ICDs) to treat heart failure and sudden cardiac death. The new devices offer enhanced therapy options, advanced battery longevity and a DF4 universal connector system in the industry's smallest and thinnest platform.

These premium high-energy devices are the world's smallest and thinnest, offer advanced battery technology with excellent longevity, and are backed by the longest warranty in the industry of up to 10 years.

The DF4 connector system makes the industry's smallest devices even smaller, potentially increasing patient comfort and making the implant procedure quicker and easier for physicians, while the new features will offer even more options for customizing patient care. The 4-SITE lead is built on the RELIANCE® family of defibrillation leads, which has a demonstrated survival probability of 99 percent at seven years.

These next-generation devices also include options to promote appropriate therapy, reduce right ventricular pacing, and improve patient management through the availability of the LATITUDE® Heart Failure Management weight scale and blood pressure cuff sensors.

To refer one of your patients for an electrophysiology consultation with one of our EP physicians regarding an evaluation for the need of ICD or CRT therapy, Please call (212) 492-5550 or (212) 280-3101

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ACAP Cardiac Research Group St. Luke's-Roosevelt hospital Center, New York, NY



THE SECOND 'CHILLING IN MANHATTAN' SYMPOSIUM "VOICES OF SURVIVORS; FOCUS ON WOMEN"

Sudden cardiac death women survivors joined doctors at this symposium in March to discuss the benefits of the hypothermia procedure, which literally froze them close to death in order to save their lives. The chilling procedure has become a way for doctors at St. Luke's to reduce damage to vital organs following a period of insufficient blood flow.



Nereida Carlo, Dr. Eyal Herzog director of Cardiac Care Unit, and Catherine Cole. Carlo and Cole, credit induced therapeutic hyperthermia with saving their lives after heart attacks

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www.NYCardiologyPathways.Org

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