WESTERN KENTUCKY HEART & LUNG



Research Foundation and Education Trust presents

Cardiovascular Symposium 2016



in partnership with



The Medical Center



Medical Center Heart Institute

September 17, 2016 • The Club at Olde Stone

Message from President and CEO

Western Kentucky Heart and Lung (WKHL) Research Foundation & Education Trust is established as a not-for-profit organization dedicated to research and continuing medical education.



We are deeply committed to improving patient health and care through evidence-based educational activities that will provide clinicians with information on the most current treatment guidelines and techniques in the field of Cardiovascular Medicine. It is toward this purpose that we have created the Annual Cardiovascular Symposium. Our associate, Dr. Jacqueline Dawson Dowe, is the director of this event. She is highly qualified for this responsibility, being a Fellow of the American College of Cardiology and holding multiple board certifications in Cardiology and Internal Medicine. This symposium will help make clinical providers Heart Smart.

Mohammed Kazimuddin, MD, FACC, FSCAIPresident, CEO
WKHL Research Foundation & Education Trust

Message from Cardiovascular Symposium 2016, Chair



Welcome to Cardiovascular Symposium 2016! This year, we are honored to partner with The Medical Center at Bowling Green and Medical Center Heart Institute to provide a comprehensive review of clinically relevant cardiovascular topics. We have brought world-class faculty in the field of cardiovascular disease to our Bluegrass State, and we encourage you to interact with the speakers throughout the day.

To highlight what I hope this conference will bring to South Central Kentucky, let me quote the immediate past president of the American College of Cardiology (ACC), Kim Allan Williams Sr., MD, MACC who says, "There have been significant gains over the last six decades in reducing cardiovascular mortality in preventing and treating the disease. However, cardiovascular disease continues to be the #1 cause of death around the world [including the US]— a position it has held since the influenza pandemic from 1918 – 1919. This goal [to remove cardiovascular disease from being the #1 cause of mortality] is well within our grasp, more so than ever before."

I hope you will use the information you gather here to help remove cardiovascular disease as the number one cause of mortality and keep your practice at the forefront of medicine.

Jacqueline Dawson Dowe, MD, FACC

Director, Cardiovascular Symposium Vice President, WKHL Research Foundation & Education Trust

Session 1: General Cardiology

8:30 - 9:30 am



Moderator: Mohammed Kazimuddin, MD, FACC, FSCAI WKHL Research Foundation and Education Trust Western Kentucky Heart and Lung Associates



Anti-Platelet Therapy in Coronary **Artery Disease: An update** Aseem Vashist, MD, FACC, FACP, FSCAI, FASNC Assistant Professor of Medicine University of Connecticut School of Medicine The Pat & Jim Calhoun Cardiology Center

Intensification of anti-platelet therapy with addition of a P2Y12 inhibitor (clopidogrel, ticagrelor, prasugrel) to Aspirin monotherapy, as well as prolongation of DAPT (dual anti-platelet therapy), necessitates a fundamental tradeoff between decreasing ischemic risk and increasing bleeding risk.

In general, shorter duration of DAPT can be considered for patients at lower ischemic risk with high bleeding risk, whereas longer duration DAPT may be reasonable for patients at higher ischemic risk with lower bleeding risk.

The recent guidelines from ACC/AHA are very helpful in guiding the DAPT in patient with both acute coronary syndromes and stable ischemic heart disease following coronary stenting.

Session 2: Cardiovascular Imaging 9:30 - 10:45 am

Non-invasive imaging has improved understanding and management of cardiovascular disorders with the benefit of lessening the potential risk for the patient. However, the proper use of these modalities requires an understanding of the fundamental concepts, including an understanding of heart failure with preserved ejection fraction (HFpEF)/diastolic heart failure as well the appropriate use of Nuclear Imaging in risk stratification of patients.



Moderator: Muhammad Shoaib Akbar, MD, FACC Director of Non-Invasive Cardiology Associate Director of Interventional Cardiology Western Kentucky Heart and Lung Associates



Risk Stratification with Nuclear Cardiology Robert L. Hendel, MD, FACC, FAHA, MASNC Professor of Medicine and Radiology University of Miami Miller School of Medicine Associate Chief Medical Officer University of Miami



Echocardiographic Diagnosis of Diastolic Dysfunction—An Old Friend with Some New Twists Marcus F. Stoddard, MD, FACC, FAHA Professor of Medicine Director Echocardiology Lab University of Louisville Hospital

Coffee Break/Exhibition 10:45 - 11:00 am

Session 3: Heart Failure Classifications 11:00 – 11:45 am



Moderator:
Jacqueline Dawson Dowe, MD, FACC
Director of Heart Failure
Director of Women's Cardiac Health
Western Kentucky Heart and Lung
Associates

Strategies to Lower Heart Failure Readmission Rates: How Low Can You Go?



Juan Aranda, MD, FACC
Professor of Medicine
Director of Heart Failure and Cardiac Transplant
University of Florida Health Cardiology
- Shands Hospital

It is important that as healthcare providers, we adequately assess the functional classification and stage of our heart failure patients. This is essential when deciding on Guideline Directed Medical Therapies (GDMT).

Heart Failure Stages and Functional Classifications

Patients are classified by their heart failure symptoms and functional limitations. The most common measure of heart failure severity is based on the NYHA (New York Heart Association) Functional Class guidelines.

CLASS PATIENT SYMPTOMS

- No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea.
- II Slight limitation of physical activity. Comfortable at rest.
- III Marked limitation of physical activity. Comfortable at rest.
- IV Unable to carry on any physical activity without discomfort. Symptoms of HF at rest.

In 2001, the American Heart Association and American College of Cardiology developed a rating system to evaluate the progression of heart failure symptoms. The following provide a description of patient as heart failure progresses.

American Heart Association Heart Failure Stages

- Stage A: Presence of heart failure risk factors but no heart disease and no symptoms.
- **Stage B:** Heart disease is present but there are no symptoms (structural changes in heart before symptoms occur).
- Stage C: Structural heart disease is present AND symptoms have occurred.
- Stage D: Presence of advanced heart disease with continued heart failure symptoms requiring aggressive medical therapy.

Session 4: Structural Heart Disease 11:45 am - 12:30 pm



Moderator:
Mohammed Kazimuddin, MD, FACC, FSCAI
President, CEO
Western Kentucky Heart and Lung Associates
WKHL Research Foundation and Education Trust



Treatment of Mitral Regurgitation
James Slater, MD
Robert and Marc Bell Professor of Cardiology
Director, Cardiac Cath Lab
NYU Langone Medical Center

Percutaneous Approaches for the

Percutaneous therapy has emerged as an option for treatment of mitral regurgitation for select high risk patients. Most of the percutaneous approaches are simply modifications of the existing surgical approaches. Due to their less invasive nature, catheter-based devices mimic surgical approaches with less procedural risk.

Catheter-based mitral leaflet repair with the Mitral Clip is accomplished with an implantable clip such as the surgical edge-to-edge leaflet repair technique.

Lunch/Exhibition 12:30 - 1:30 pm

Session 5: Breakout Session 1:30 - 2:30 pm



Moderator: Aniruddha Singh, MD, FACC Director of Preventive Cardiology & Vascular Medicine Western Kentucky Heart and Lung Associates

Cardiology Fellows Poster Presentation (2nd Floor Conference Room in the Golf House)

Or.



Hypothermic Protocol: An Update Leanna R. Miller, DNP, RN, CCRN-CMC, CNRN, NP Western Kentucky University School of Nursing (Grand Ballroom in Village Hall)

Ischemic brain injury is common in patients with cardiac arrest. Studies have shown that lowering brain temperature in patients with cardiac arrest from ventricular fibrillation improves neurological outcomes. Inducing mild therapeutic hypothermia has proven to be one of the most important clinical advancements in the science of resuscitation.

Beneficial effects of hypothermia in patients with non-ventricular fibrillation arrest is not yet clear. Having correct patient selection, knowing exclusion criteria, and understanding the protocol and supportive therapy is crucial in administering hypothermia properly.

Session 6: Interventional Cardiology 2:30 – 3:15 pm

Acute coronary syndrome (ACS) continues to be a lifethreatening disorder that despite advances in treatment is a major contributor of high morbidity and mortality.

The American Heart Association reports that coronary heart disease alone causes 1 out of every 7 deaths in the United States. Every 34 seconds one American has a coronary event and every 84 seconds one American dies from such an event.

ACS is one of the major contributors to health care cost in the United States. ACS costs approximately \$150 billion a year in medical expenses. Nearly 1.5 million hospital discharges involve patients with ACS. Approximately 20% of the ACS patients are rehospitalized within 1 year, and nearly 60% of the costs related to ACS result from re-hospitalization. Appropriate and prompt diagnosis and treatment along with aggressive preventive measures will decrease morbidity, mortality and costs associated with this disease.



Moderator: Mohammad Abdul Waheed, MD, FACC, FSCAI Director of Interventional Cardiology Associate Director of Heart Failure Western Kentucky Heart and Lung Associates



Management of Acute Coronary Syndrome Tarek Helmy, MD, FACC, FSCAI

Professor of Medicine-Division of Cardiovascular Medicine Medical Director, Gerard Mudd Cardiac Catheterization Laboratory Saint Louis University School of Medicine, Saint Louis Missouri

Coffee Break/Exhibition 3:15 - 3:30 pm

Session 7: Vascular Medicine 3:30 - 4:15 pm



Moderator: **Shane O'Keeffe, M.D.**Board Certified Vascular Surgeon

Medical Center Heart Institute



Renal Artery Stenosis
Matthew Corriere, MD, MS
Associate Professor
Section of Vascular Surgery
Frankel Cardiovascular Center
University of Michigan Health System

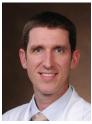
Renal artery stenosis is the major cause of renovascular hypertension with an estimated prevalence between 1-10% in patients with hypertension. Besides its role in hypertension, renal artery stenosis is also associated with pathogenesis of chronic renal insufficiency. Therefore, recognizing and treating renal artery stenosis is essential. However, controversy surrounds the best approach to patients with renovascular stenosis. The optimal approach to treating renovascular hypertension requires a multidisciplinary approach.

Session 8: Electrophysiology 4:15 - 5:00 pm

Atrial fibrillation is the most common sustained arrhythmia, and it increases the risk of stroke in many patients who have it. Treatment to reduce this stroke risk have certain disadvantages, primarily an increased risk of bleeding. A device to occlude the left atrial appendage, which is the source of 90% of the thrombi that occur in atrial fibrillation, has been approved by the FDA. Implantation of this device can eliminate the need for long term oral anticoagulation.



Moderator:
Jeffrey Brumfield, MD, FACP, FACC, FHRS
Director of Cardiac Electrophysiology
Western Kentucky Heart and Lung Associates



Stroke Risk Reduction in Atrial Fibrillation Christopher R. Ellis, MD, FACC, FHRS Associate Professor of Medicine Director Cardiac Electrophysiology Laboratory Director LAA Closure Program Vanderbilt Heart and Vascular Institute

Award Presentation & Closing Remarks 5:00 - 5:15 pm

Learning Objectives

- 1. Discuss mechanism of action of new antiplatelet drugs.
- 2. Discuss updates in dual antiplatelet therapy guidelines.
- **3.** Describe SPECT myocardial perfusion imaging findings that identify a patient at high risk for subsequent cardiac events.
- State various clinical indications for which nuclear cardiology methods offer assistance in clinical decision making.
- 5. Diagnose classic patterns of diastolic dysfunction by echocardiography.
- **6.** Discuss newer complex non-classical forms (e.g., preglobal, pseudo-pseudo normal) of diastolic dysfunction by echocardiography and to be able to apply echocardiographic strain for assessment of diastolic function.
- 7. Describe the issues surrounding an acute heart failure patient.
- 8. Review strategies to reduce heart failure admission and readmissions.
- **9.** State the etiology and prevalence of mitral regurgitation in the population.
- 10. Discuss the percutaneous treatment options available and in development for mitral regurgitation.
- **11.** Identify selection criteria for the implementation of Targeted Therapeutic Management of patients post cardiac arrest.
- **12.** Discuss the American Heart Association (AHA) 2016 guidelines for Targeted Temperature Management (TTM).
- 13. Discuss pharmacological therapy for Acute Coronary Syndrome.
- 14. Discuss interventional approach to patients with Acute Coronary Syndrome.
- **15.** Review the epidemiology, pathophysiology, and presentation of symptomatic renal artery stenosis, including contrasts between stenosis resulting from atherosclerosis versus fibromuscular dysplasia.
- **16.** Review the diagnostic evaluation and treatment of renal artery stenosis, including results and limitations of randomized trials.
- 17. Discuss that the commonly used "CHA2DS2-VASc score" does not incorporate notable patient risk factors which predict a stroke.
- **18.** Explain that alternatives to oral anticoagulation (OAC) exist and are currently available for patients who are not good long term OAC candidates.



This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of The Medical Center at Bowling Green and Western Kentucky Heart & Lung Research Foundation and Education Trust.

The Medical Center at Bowling Green is accredited by the Kentucky Medical Association to provide continuing medical education for physicians. The Medical Center at Bowling Green designates this live activity for a maximum of *7 AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Commonwealth Health Corporation is accredited as a provider of continuing nursing education by the American Nurses Credentialing Centers Commission on Accreditation (ANCC). The Medical Center is approved by the Kentucky Board of Nursing under the provider number 4-0101.

Nursing Contact Hours: 7 Hours ANCC & 8.4 Hours KBN Provider #4-0101-01-17-1332

*Nursing participants must attend the entire program and return a completed program evaluation to receive continuing education hours.

ADA Information: The Medical Center complies with the Americans with Disabilities Act. If you have any special needs, please contact Vivian Grise at 270-782-0151 prior to the activity.

Disclosure Information:

In accordance with ACCME/ANCC Standards, all individuals involved with the planning, presenting, or coordinating process of this activity are required to disclose to the activity audience the presence of significant relationships with commercial companies whose products are discussed in their presentations and any real or apparent conflicts of interest related to the content of their presentation. Additionally, disclosure must be made when a product discussed in their presentation is still investigational or not labeled for the use under discussion.

Any relevant disclosures will be shared prior to presentations taking place.

WESTERN KENTUCKY HEART & LUNG



Research Foundation and Education Trust

825 Second Ave., Ste B1 Bowling Green, KY 42101 270.782.0151 www.wkheartandlung.com



