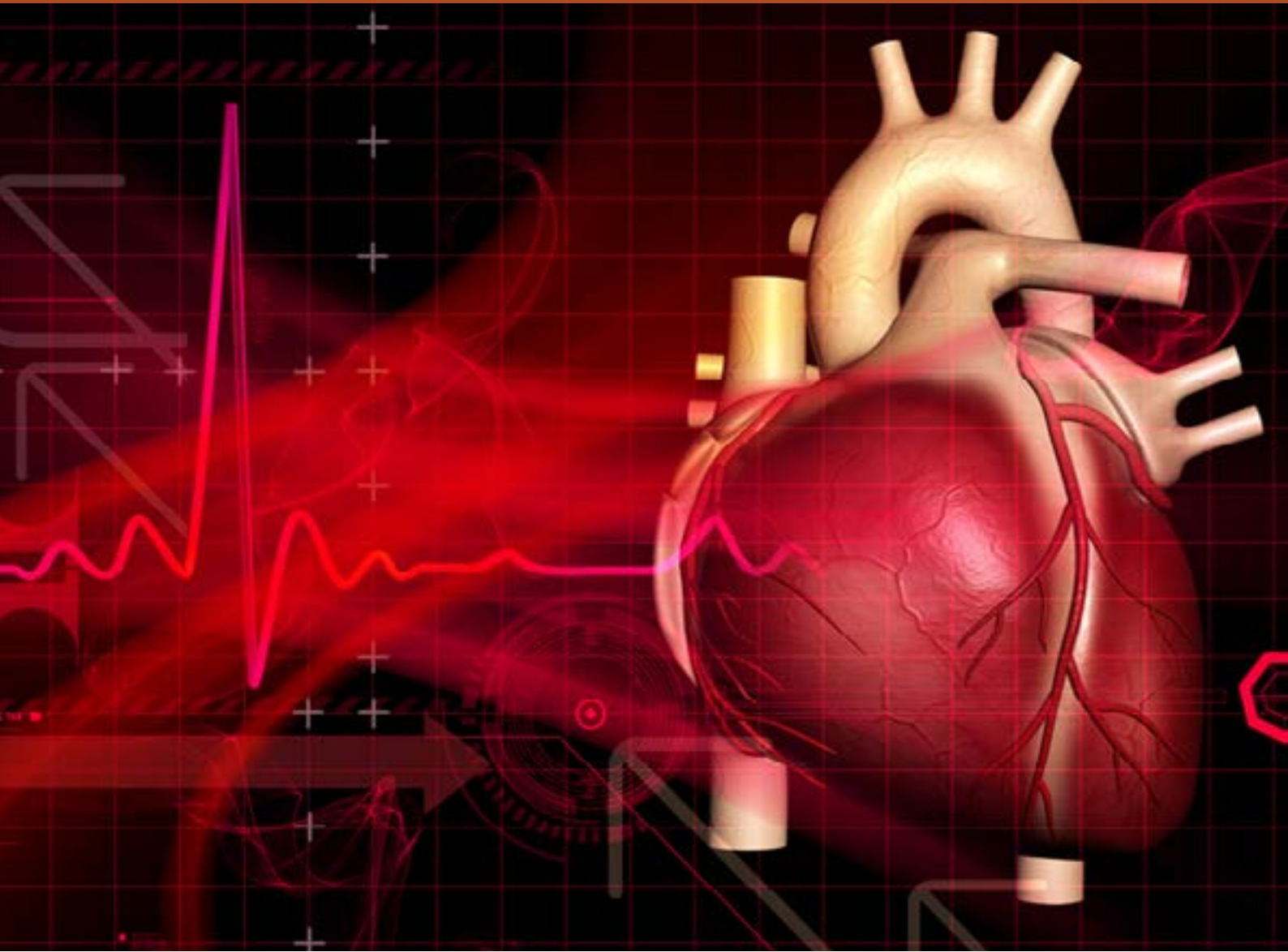


SCIENTIFIC PROGRAM



20 YEARS OF EXCELLENCE
IN INTERNATIONAL
MEETINGS
alliedacademies.com

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Allied Academies
85 Great Portland St, Marylebone
London W1W 7LT, UK
<http://www.alliedacademies.com/>



International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

KEYNOTE FOURM

International Conference on
**CARDIOLOGY AND
CARDIOVASCULAR MEDICINE**

June 18-19, 2018 | Osaka, Japan



NIDHISH TIWARI

HJacobi Medical Center, USA

NEWER ECHOCARDIOGRAPHIC TECHNIQUES FOR AORTIC VALVE IMAGING: CLINICAL AIDS TODAY, CLINICAL PRACTICE TOMORROW

BIOGRAPHY

Dr. Nidhish Tiwari completed medical school in New Delhi, India and moved to the USA to pursue his medicine residency and chief residency at Jacobi Medical Center followed by the fellowship in cardiology from Montefiore Medical Center, both under Albert Einstein College of Medicine at Bronx, New York, USA. He has been trained as level III Echocardiographer which implies mastery of novel and innovative cardiac imaging techniques. He is currently working as Assistant Professor at Albert Einstein College of Medicine and is also an Associate Director of Cardiovascular Service at North Central Bronx Hospital at Bronx, New York, USA. He has been given many awards for teaching medical students and residents. In a short period, he has been endowed with fellowships in prestigious organizations such as FACC (American College of Cardiology), FASE (American Society of Echocardiography) and FACP (American College of Physicians). He has published many peer-reviewed manuscripts, reviews and a book chapter. He is also on editorial board of many journals and involved in planning committee of the annual scientific meeting of New York chapter of American College of Physician (ACP). ecechocardiography.

Increasing life expectancy is expected to lead to a corresponding increase in the prevalence of aortic valve disease (AVD). Further, the number of indications for transcatheter aortic valve replacement (TAVR) as a treatment option for AVD is expanding, with a growing role for echocardiography in its management. In this review we summarize the current literature on some newer echocardiographic modalities and the parameters they generate, with a particular focus on their prognostic and clinical value beyond conventional methods in the management of aortic stenosis, TAVR, and aortic regurgitation. Speckle tracking and 3D echocardiography are now increasingly being used in the management of AVD. For instance, global longitudinal strain, the best-studied speckle tracking echocardiographic parameter, can detect subtle subclinical cardiac dysfunction in patients with AVD that is not apparent using traditional echocardiographic techniques. The emerging technique of 3D full volume color Doppler echocardiography provides more accurate measurement of the severity of aortic regurgitation than 2D-proximal isovelocity surface area. These novel techniques are promising for evaluating and risk stratifying patients to optimize surgical interventions, predict recovery, and improve clinical outcomes.



International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

SCIENTIFIC TRACKS & ABSTRACTS

SESSIONS

June 18-19, 2018

Clinical Cardiology | Cardiomyopathy and Heart Failure | Heart Diseases and Risk Factors | Cardiac Diagnosis | Cardiac Regeneration | Cardiac Surgery

Session Introduction

- Title:** **Novel Approaches For Endogenous Heart Repair**
Tamer M A Mohamed, United Kingdom
- Title:** **Hf Day Treatment Centre, A Novel Service Design**
Teresa Castiello, USA
- Title:** **Mechanisms Mediating Vascular Occlusion In Thromboinflammatory Diseases: Role Of Thiol Isomerases**
Jaehyung (Gus) Cho, USA
- Title:** **Reasons For Lack Of The Responsiveness To Fluid Load During Preoperative Period**
Simon Gelman, USA
- Title:** **Target Organ Damage And Cardiovascular Complications Of Hypertension In Low Resource Setting**
Basden Onwubere, Nigeria
- Title:** **Multi-Center Clinical Report Of Cardiopulmonary Resuscitation With Abdominal Lifting And Compression**
Danyang Peng, China
- Title:** **Biophysical Profile Of Blood Pressure In Urban School Children**
K. Pavan Kumar, India
- Title:** **Brain And Heart: The Clinical Link**
Fernando Mut, Uruguay
- Title:** **The Challenge Of Diagnosing Coronary Heart Disease (Chd) In Women. The Special Role Of Ecg-Gated Spect Myocardial Scintigraphy (Ms)**
I Garty, Israel
- Title:** **Brihh In Patients With Dm. Repercussion And Diagnosis In Studies Of Myocardial Perfusion With Sestamibi.**
Gómez Garibo José Rubén, Mexico
- Title:** **Effective And Prevalent Monitor And Diagnosis Evidence, The Computer-Aided Analysis Range And Level Of Electrocardiogram**
Jun Dong, China
- Title:** **Impact Of Mobile Health Technology On Blood Pressure Regulation In Adults With Hypertension**
Kim Maher, Mexico
- Title:** **Lvad Bridge For Recovery**
Mustafa Alrefae, Saudi Arabia
- Title:** **Time Sequence Functional Stent: A Novel Conception And Clinic Practice**
Nan Huang, China
- Title:** **The Role Of Dobutamine Dose On The Cardiac Parameters**
Rabindra Nath Das, India
- Title:** **Less Invasive Hybrid Procedures In Cardiac Surgery.**
Rainer Moosdorf, Germany

SESSIONS

June 18-19, 2018

Clinical Cardiology | Cardiomyopathy and Heart Failure | Heart Diseases and Risk Factors | Cardiac Diagnosis | Cardiac Regeneration | Cardiac Surgery

Session Introduction

- Title: Alcohol Consumption And Gender Gap In Cardiovascular Disease Mortality In Russia**
Razvodovsky Y.E., Russia
- Title: Prevalence Of Human Immunodeficiency Virus, Clinical Presentation And Related Factors Among Adult Patients With Heart Failure At Jakaya Kikwete Cardiac Institute**
Samwel Jacob Rweyemamu, Tanzania
- Title: Ace Phenotyping As A Guide For Personalized Therapy With Ace Inhibitors**
Sergei M. Danilov, Russia
- Title: Clinical Research And Application Of New Technique About Abdominal Cardiopulmonary Resuscitation.**
Sisen Zhang, China
- Title: Hospital Outcome Of Acute Hyperglycemia And Tnf-A In Patients With St-Elevation Myocardial Infarction**
Taha Ahmed Al-Maimoony, Egypt
- Title: Standard Versus Abdominal Lifting And Compression Cpr**
Vivian Liu, China
- Title: Relation Between Bronchial Asthma And Parasitic (Nematodes) Infection In Egyptian Children**
Mohammed Y, Egypt
- Title: Cabg In Diffuse Coronary Artery Disease**
Shyam K Ashok, India
- Title: Mineralocorticoid Receptor Antagonism : Mew Opportunities For Cardiovascular Research**
Bertram Pitt, USA

Global Cardiology Congress 2018

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

NOVEL APPROACHES FOR ENDOGENOUS HEART REPAIR

Name & Country

Tamer M A Mohamed

United Kingdom

Abstract

Background: Heart failure is often caused by loss of cardiac cells that are unable to re-enter the cell cycle for regeneration. Numerous attempts to identify such cell cycle regulators that could induce cell division of cardiomyocytes, or other cell types, have resulted in nuclear division (karyokinesis), but inefficient cleavage into two distinct daughter cells (cytokinesis) and subsequent survival. Such strategies stimulate cell cycle markers in no more than 1% of cardiomyocytes, limiting their utility.

Methods and results: Here, we took a combinatorial approach to screen for cell cycle factors and conditions that could recapitulate the fetal state of cardiomyocyte division. We found that ectopic introduction of the Cdk1/CyclinB1 and the Cdk4/CyclinD1 complexes promoted cell division in at least 15% of mouse and human cardiomyocytes in vitro. Rigorous assessment of cell division in vivo with the cardiac specific (-MHC) Cre-recombinase dependent Mosaic Analysis with Double Markers (MADM) lineage tracing system revealed similar efficiency in adult mouse hearts, leading to cardiac regeneration upon delivery of cell cycle regulators immediately after myocardial infarction and even one week after injury. This ability of cardiac regeneration resulted in significant improvement in cardiac function following acute or subacute myocardial infarction. Intra-myocardial injection of adenoviruses encoding the 4 cell cycle gene either injected at the time of the infarction or one week following myocardial infarction resulted in significant improvement in cardiac function as assessed by echocardiography and MRI compared to animals received control virus. Furthermore, chemical inhibition of Tgf and Wee1 made CDK1 and cyclin B dispensable, simplifying the minimal genetic requirement.

Conclusion: These findings reveal a discrete combination of genes that can unlock the proliferative potential in cells that had permanently exited the cell cycle.

Biography

Dr. Tamer Mohamed has completed his PhD at the age of 30 years from University of Manchester (UK). He has got a joint position between the University of Manchester – UK and the Gladstone Institute – San Francisco – USA. He has published more than 25 papers in reputed journals with a most recent paper in the renowned journal of Cell.

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

HF DAY TREATMENT CENTRE, A NOVEL SERVICE DESIGN

Name & Country

Teressa Castiello

USA

Abstract

BACKGROUND: Heart Failure (HF) is a significant public health problem, being one of the most common causes of acute hospital admissions and hospital bed occupancies. It affects over 900,000 people in the UK, and the prevalence is set to rise in the next two decades; this will result in a significant increase in health expenditure (3.2% of the total healthcare expenditure in Western Europe). HF patients are frequently under-treated, despite good evidence that optimal care improves survival and quality of life. There are several key aspects in the management of HF, including the initial diagnostic work-up aimed at reaching an aetiological diagnosis and the commencement of optimized medical therapy to improve quality of life, survival and to reduce hospitalizations. A local Audit was carried out to analyze the profile of the population in the Croydon borough of London and to investigate the causes of non-elective HF admission in order to prevent them and to promote a more effective management. The Audit identified a fragile population, insufficiently referred to HF specialists (51%), with poor compliance (21%) and in sub-optimal therapy (27%) suggesting a large number of preventable admissions. The majority of non-elective hospital admission had sub-acute presentation with relatively mild symptoms or signs of failure. The key objective of the Audit was to guide a novel service design. Among the possible solutions, a day hospital setting was suggested (Heart Failure Day Treatment Centre (HFDTC)).

AIM AND HYPOTHESIS: Croydon Clinical Commissioning Group aspired to commission an innovative service largely based on this Audit results. The aim was to design a service to improve quality and reduce admission and readmission costs, achieving a 10% reduction of non-elective admission rate. We hypothesized that a new service will reduce both non-elective hospital admission of patients with known HF and readmission rate within 30 days, increasing patients access to specialised care, through sub-acute care provision with significant reduction of in-patient bed demand.

CHALLENGE: Service design implies a delicate balance between quality and cost effectiveness. Most of the challenges lies on funding limitation and agreement among Providers and Commissioners. The contract with Commissioners needs to cover adequately the cost of the service maintaining the high standard quality of care. Other significant challenge is the current estimation of demand and capacity and the coordination with the co-existing Teams in order to select and treat the adequate population.

CONCLUSION: The HFDTC is the first of its kind in the UK and acts effectively as day hospital for patients with established diagnosis of HF. It guarantees prompt assessment and treatment by the HF specialist Team with the aim to reduce acute HF admissions which will result in a decrease in costs and improvement in patients quality of life. The cost-effectiveness of this model will be analyzed with the support of a designed Audit Tool.

Biography

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

MECHANISMS MEDIATING VASCULAR OCCLUSION IN THROMBOINFLAMMATORY DISEASES: ROLE OF THIOL ISOMERASES

Name & Country

Jaehyung (Gus) Cho

USA

Abstract

Real-time intravital microscopic studies have provided compelling evidence that intravascular cell-cell aggregation directly contributes to vascular occlusion and tissue damage, a leading cause of morbidity and mortality of patients with cardiovascular diseases. In particular, platelet-leukocyte interactions on the activated endothelium are crucial for the initiation and progression of thrombotic and inflammatory diseases. Platelet-leukocyte adhesion is mediated mainly through the interactions of platelet P-selectin and glycoprotein Iba with neutrophil P-selectin glycoprotein ligand-1 and $\alpha\text{M}\beta 2$ integrin, respectively. Despite our knowledge of the major receptors and counter-receptors, it remains poorly understood how the receptor-counter-receptor interactions are controlled during cardiovascular diseases. Evidence is mounting that the function of plasma proteins and cell surface receptors involved in thrombosis and inflammation is controlled by oxidation or reduction of allosteric disulfide bonds. Thiol isomerases catalyze thiol-disulfide exchange and regulate protein folding and function. Intriguingly, despite having an endoplasmic reticulum retention signal, several thiol isomerases are released from intravascular cells and detected in the circulation and on the cell surface. We have demonstrated that the plasma level of protein disulfide isomerase (PDI), a prototypic thiol isomerase, is enhanced during thrombosis and vascular inflammation and that extracellular PDI plays a critical role in platelet-leukocyte aggregation under thromboinflammatory conditions. In this presentation, I will discuss the molecular mechanism by which PDI participates in the initiation and progression of thromboinflammatory diseases. A better understanding of the molecular basis of thiol isomerase-mediated cell-cell interactions will provide insights into the development of novel therapeutic agents for the prevention and treatment of cardiovascular diseases.

Biography

Jaehyung (Gus) Cho has obtained his PhD degree at the University of Wisconsin-Madison in 2006. After a postdoctoral training at Harvard Medical School, he started his independent position in the Department of Pharmacology at the University of Illinois-Chicago. Currently, he is an Associated Professor at the same institution. He is on Editorial Board member in Frontiers in Medicine and has served as an Ad-hoc reviewer for numerous journals including Blood, J Clin Invest, J Exp Med, and Sci Transl Med and for grants. He has published 35 papers in peer-reviewed, top-tier journals.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**REASONS FOR LACK OF THE RESPONSIVENESS TO FLUID LOAD
DURING PREOPERATIVE PERIOD**

Name & Country

Simon Gelman

USA

Abstract

Approximately half of patients receiving Goal Directed Hemodynamic Therapy during peri-operative period demonstrate lack of an increase in Cardiac Output (CO) to fluid load (1). Cardiac insufficiency and severe hypovolemia may be the reasons for such observations. However, an often overlooked reason may be unfavorable distribution of infused fluid between stressed and unstressed volumes (Vs and Vu, respectively). A portion of infused fluid may end up in the Vu and therefore would not result in an immediate change in the hemodynamics. An additional fluid infusion could lead to fluid overload. Higher the venous capacity and/or venous compliance would be associated with larger portion of the infused fluid increasing the Vu, without an expected increase in Vs and CO. Therapy that includes medication decreasing Vu, thereby increasing Vs and CO, should be effective. Such medication should consist of small doses of alpha- adrenergic or alpha- and beta-adrenergic compounds, preventing fluid overload thereby decreasing the rate of postoperative complications and length of stay in the ICU and hospital. The presentation would provide the physiologic basis and clinical and experimental observations justifying such an approach.

Biography

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**TARGET ORGAN DAMAGE AND CARDIOVASCULAR
COMPLICATIONS OF HYPERTENSION IN LOW RESOURCE
SETTING**

Name & Country

Basden Onwubere

Nigeria

Abstract

SUMMARY: The past one century has seen remarkable changes in the prevalence, and clinical outcomes of high blood pressure globally but notably in Africa and developing economies generally. This paper reviews the current picture of target organ damage and cardiovascular complications in Africa using available literature as well as meta-analyses. Significant observations show that about two-thirds of individuals with high blood pressure worldwide live in the developing countries. Projections for 2025 see an increase of this proportion to 75 per cent. Low awareness levels, late presentation, and low treatment and control levels contribute to the higher prevalence of target organ damage and other cardiovascular complications in hypertensive subjects in Africa. Concerted efforts from stakeholders are recommended to combat this scourge in Africa and other developing countries globally.

INTRODUCTION: Historical Perspectives Donnison in 1929 noted: "Over two years at a native hospital in the South of Kavirondo in Kenya, during which period approximately 1800 patients were admitted, no case of raised BP was encountered, although abnormally low BP was not uncommonly encountered. On no occasion was a diagnosis of arteriosclerosis or chronic interstitial nephritis made"

1. This situation has since changed tremendously. High Blood Pressure (HBP) constitutes an important public health burden globally. Currently, Systolic Blood Pressure greater than 115 mmHg is responsible for 7.8 million deaths globally annually (13.5% of all deaths). About 92 million (6% of total) of the sum of deaths and disability adjusted life years (DALYs). It is predicted that Non-communicable disease (NCD) forms of cardiovascular diseases will become the leading cause of death and disability globally, by 2020. In 2000, 972 million people had HBP, with a prevalence rate of 26.4%, 333 million in economically developed countries and 639 million in economically developing countries. It is projected that by 2025 a total of 1.54 billion people accounting for 30% of the World population would be hypertensive with 75% of these from the developing countries and regions

2. Most African countries belong to this group. Eight years to this predicted date, this target is almost attained. In Africa only 5-10% have a BP control to level of <140/90 mm Hg. Due to delayed and/or inadequate therapeutic management and to a likely genetic predisposition, target organ-related complications are more common and occur earlier in Black Africa.

SUBJECTS AND METHODS: Meta-analyses of publications on hypertension and related cardiovascular complications in Africa were carried out. Extensive literature search was carried out^{4, 5}.

Biography

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**MULTI-CENTER CLINICAL REPORT OF CARDIOPULMONARY
RESUSCITATION WITH ABDOMINAL LIFTING AND COMPRESSION**

Name & Country

Danyang Peng

China

Abstract

Objective: To study the effectiveness and safety of abdominal lifting and compression method in patients suffered from cardiac arrest(CA).

Methods: According to the inclusion and exclusion criteria, 72 patients from Hainan People's Hospital and Zhengzhou People's Hospital were enrolled for study of abdominal lifting and compression(ALC)method from January 2014 to June 2015. The markers of respiratory and circulatory performance of all patients were recorded, and re-collected after CPR with ALC. In addition, the data of demographics and clinical signs of patients were collected. The rates of restoration of spontaneous circulation(ROSC) and successful resuscitation were calculated. Differential analysis of single-group design univariate quantitative and qualitative data was carried out.

Results: A total of 72 patients were included finally. The ROSC rate was 15.3%(11/72) after using ALC equipment, and there was no statistically significant difference in rate of ROSC($P=0.566$) between ALC and pre-test(13.0%). However, compared with NT group resuscitated without using ALC method or with using chest compression method, the rate of ROSC was significantly improved in the ALC group(15.3% vs.0.1%, $P<0.01$).

Conclusions : Abdominal lifting and compression CPR equipment is stable, portable and safe in practice. Abdominal lifting and compression CPR method has its prominent role in saving patients from respiratory and cardiac arrest, and it is sufficient to overcome the disadvantages of conventional CPR method.

Biography

Danyang Peng, Master of medicine, emergency department attending physicians of Zhengzhou people's hospital. Has published 5 academic papers in domestic journals, 2 of them are about abdominal lifting and compression CPR. She has participated in many clinical applications of abdominal lifting and compression CPR, and has more profound understanding about this new technology.

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

BIOPHYSICAL PROFILE OF BLOOD PRESSURE IN URBAN SCHOOL CHILDREN

Name & Country

K. Pavan kumar

India

Abstract

INTRODUCTION: Hypertension is associated with high morbidity and mortality. It was documented that almost 75 % of cases of Hypertension and 90 % cases of Pre-hypertension in children and adolescents are undiagnosed . The Children in the upper percentile of Blood Pressure levels are more likely to become hypertensive in adulthood. Hence, early recognition of Hypertension & its risk factors in children may help in preventing cardiovascular diseases in later life.

OBJECTIVES: To Study the prevalence of Pre-hypertension & hypertension and the relationship of Blood Pressure with variables like Age, Sex, Weight, Height, Body Mass Index (BMI), Socioeconomic status and Family history in Urban school children.

MATERIAL AND METHODS: The present study is a Cross • sectional study, conducted on 2500 children in the age group of 5 • 14 years from 20 randomly selected (using systemic sampling technique) schools of Hyderabad city during March 2015 - June 2016. Blood pressure measurements were made in the Right arm in sitting position by using a standard mercury sphygmomanometer with different sized cuffs as per AHA recommendations. Definitions of Hypertension & Pre hypertension as per Fourth task force report on childhood hypertension.

RESULTS AND OBSERVATIONS: The Prevalence of Hypertension among children between 5 • 14 years was 7.2 % (6.6 % in Boys & 7.9 % in girls), with high Prevalence in 7 & 8 yr age group. The Prevalence of Pre-hypertension was 4.7 % and was found to be twice in Boys (6.2 %) as compared to that in Girls (3 %). Multiple regression analysis showed Positive and significant correlation of age, weight, height, BMI, Socioeconomic status & Family history with each SBP and DBP. The mean SBP and DBP in obesity group (123.3 mm of Hg & 76 mm of Hg) were significantly higher than Overweight (109.4 mm of Hg & 69.8 mm of Hg), while overweight was significantly higher than normal weight group (103 mm of Hg & 64.3 mm of Hg), ($P < 0.0001$).

There were high mean Systolic & Diastolic blood pressures in the children of High socio • economic status. Family history of hypertension in one or both parents was present in 16.8 % children with high blood pressure compared to 6 % in normotensive parents.

CONCLUSIONS: Regular Blood pressure measurement of children is mandatory for early detection of Pre hypertension & Hypertension. High Body mass index & Positive Family history of Hypertension forms an important indicator of childhood hypertension and needs close monitoring.

Biography

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

BRAIN AND HEART: THE CLINICAL LINK

Name & Country

Fernando Mut

Uruguay

Abstract

There is solid evidence that brain disturbances can affect the heart, and vice-versa. In this talk, the author explains the anatomic and physiologic pathways between the Central Nervous System and the heart, especially through nervous connections, and the normal regulation of cardiac activity in healthy individuals. Pathologic changes related to mental stress are also reviewed, as well as some catecholamine cardiomyopathies like takotsubo syndrome with its imaging correlation using modern techniques. Also, denervation of the heart in Parkinson's disease is addressed from the pathophysiologic point of view and how molecular imaging can help in differential diagnosis. The heart in dementia and recent advances in amyloid and tau imaging are also reviewed, and finally the link between some brain structures, stress, inflammation, and atherosclerosis is discussed.

Biography

Fernando Mut, M.D. has studied Medicine in Montevideo, Uruguay where he also received his degree in Nuclear Medicine in 1984. He was Clinical and Research Fellow at UCLA in California, USA (1986-87). He was Assistant Professor of Nuclear Medicine at the University of the Republic in Montevideo, Uruguay. He has been a Consultant and Expert for the International Atomic Energy Agency (IAEA) with headquarters in Vienna, Austria for more than 18 years. He has conducted several training courses and expert missions in developing countries under the IAEA's auspice, especially in Latin America, but also in Europe and Asia. He has published more than 35 articles as first author or co-author in international peer-reviewed indexed journals. He has also contributed with many local and regional publications, and is currently Editor-in-Chief of Alasbimn Journal.

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

THE CHALLENGE OF DIAGNOSING CORONARY HEART DISEASE (CHD) IN WOMEN. THE SPECIAL ROLE OF ECG-GATED SPECT MYOCARDIAL SCINTIGRAPHY (MS)

Name & Country

I Garty

Israel

Abstract

Background of the study: Cardio-vascular diseases (CVD) are the number one health threat and the main cause of death in American women, according to the official publication of the American Heart Association. In women, heart disease is too often a "silent killer", and often is presented by non-specific symptoms. Furthermore, investigators from the University of Michigan found that women with heart disease tend to minimize their symptoms far more than men. Based on the above mentioned facts and observations, many authors consider the early diagnosis of CHD in women as a real challenge. The aim of this study is to try to improve the scintigraphic imaging modalities for earlier and more accurate diagnosis of CHD in women, especially in patients presented with non specific symptoms.

Methodology: During the last ten years (2003-2012) 4200 patients (1570 females and 2630 males) were admitted to our department for myocardial scintigraphy. All of them underwent ECG-gated SPECT study. 2813 patients: 480 (17%) females and 2333 (83%) males achieved full-stress ergometric study, prior to the injection of the radiopharmaceutical. The remaining patients (1387) underwent drug-induced stress studies.

Results: Comparison of the results of stress studies to the scintigraphic studies showed that among 480 females with full-stress studies, 382 (79.5%) showed positive stress versus 1520 among 2333 males (65%). Among 382 female patients with positive stress study 304 (79.5%) showed positive scintigraphic study. Among 1520 males with positive stress studies 1270 (83.5%) showed positive scintigraphic studies. Among 98 females with negative stress studies 42 (43%) showed positive scintigraphy versus 670 (82.5%) among the 813 males with negative stress study. 1720 (75%) of 2286 patients with positive scintigraphy were sent for further evaluation by CA versus 220 (11.5%) among 1914 patients with negative scintigraphic studies. The comparison of CA results to ECG stress and scintigraphic results in males and females are now in progress.

Conclusions I:

- 1- Fewer female patients are referred to stress scintigraphic studies compared to male patients.
- 2- More positive ECG stress studies in women, probably due to the high percent of women who arrived too late for imaging evaluation (Case No. 6).
- 3- More false positive ECG stress studies and scintigraphic findings in women (Case studies No. 1 and 2).
- 4- Due to the lower sensitivity of CA in women, the combination of ECG exercise study and myocardial scintigraphy may considerably improve the diagnosis accuracy (Case study No. 1 and 6).
- 5- SPECT myocardial scintigraphy was proved to be an efficient non-invasive modality in women with suspected CHD and is much more sensitive than ECG study alone (Case Studies No.1 and No. 5).

Conclusions II:

- 6- We faced some difficulties in the interpretation of gated SPECT studies, especially in obese women. Delayed viability studies might be of great help in the equivocal cases (Case studies No. 2 and 6).
- 7- Fewer females than males achieved full stress study (Case Study No. 3).
- 8- In females that are unable to achieve full ergometric stress, drug-induced myocardial scintigraphy is recommended (Case Study No. 3).
- 9- Due to the difficulties in diagnosing CHD in diabetic women, myocardial scintigraphy should be the first choice in evaluating diabetic women with suspected CHD (Case Study No. 4).
- 10- More extensive study, comparing some other non-invasive imaging modalities, as well as investigation of the predictive value of these modalities for CHD morbidity and mortality in males and females, are now in progress.

Biography

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**TIBRIHH IN PATIENTS WITH DM. REPERCUSSION AND
DIAGNOSIS IN STUDIES OF MYOCARDIAL PERFUSION WITH
SESTAMIBI**

Name & Country

Gomez Garibo Jose Ruben

Mexico

Abstract

It is known that the LBBH has different etiologies, among which, we must consider the obstructive coronary atherosclerosis, mainly in the anterior descending coronary artery, however, there have been no analyzes that specifically assess the presence of LBBH in diabetic patients and its impact on myocardial perfusion studies with sestamibi. The purpose of this study is to know if the diabetic patient, with LBBB, will increase the probability that said blockade is related to obstructive coronary atherosclerosis, detected by myocardial perfusion studies, with sestamibi as a radiopharmaceutical. Additionally, the diagnostic accuracy of the study will be assessed to adequately characterize the absence or presence of CAD.

Methods: In a retrospective way, 128 patients with LBBH were selected, sent to the nuclear medicine service from 2013 to 2016, with suspicion of CAD. Of these patients, 68 (41 women and 27 men, average age 65 years, age range of 54 to 88 years) had diabetes mellitus, among other known risk factors. The remaining 60 patients (36 women and 24 men, average age 69 years, age range of 54 to 88 years), suffered from other risk factors other than diabetes. The patients followed the protocol for the preparation and conduct of myocardial perfusion studies of the American guidelines. Patients without BRDHH were excluded. Stress tests of all patients were performed with dipyridamole. The scintigraphic studies were reviewed by two nuclear physicians independently. The reference test against which the results were compared, was therapeutic coronary angiography, in the patients who were found to have CAD by our method. And when the treating physician considered it, in patients without CAD by our method, coronary angiotomography was requested. **Results:** Of the 68 patients with diabetes mellitus, 52 were found to have CAD and 16 without CAD. Of the 60 non-diabetic patients, 48 were found to have CAD and 12 without CAD. The chi square test was used to establish a relationship between the known variables (diabetes and branch block / non-diabetics and branch blockade, healthy and sick). The null influence of diabetes mellitus on the increase in CAD in patients with LBBH, was considered as a null hypothesis. The result was that such hypothesis was confirmed. Regarding the diagnostic accuracy of the nuclear medicine study in patients with diabetes, it was 94.1%, sensitivity of 94.2% and specificity of 93.8%. In non-diabetic patients, the diagnostic accuracy of the nuclear medicine study was 93.8%, sensitivity of 93.8% and specificity of 93.8%. In both cases, positive predictive values were found, above 97%.

Conclusions: It was concluded that in patients with LBBH, who have DM type 2 as a base disease, per se, they are not more likely to suffer from obstructive coronary atherosclerosis, in comparison with patients with LBBH, but without diabetes mellitus. risk factor. As a second conclusion, it was possible to determine the high positive predictive value and the high sensitivity and specificity for the detection of CAD by the myocardial perfusion scintigraphy method, performing the pharmacological stress phase, since an excellent correlation was found both with coronary angiography Therapy in the case of diabetic and non-diabetic patients, who presented CAD, as in the patients of the patients that were without CAD and that the attending physician considered to perform additional studies.

Biography

José Rubén Gómez Garibo, made his studies of General Medicine and Specialty of Nuclear Medicine at the National Autonomous University of Mexico (UNAM), ending in 2011, he later conducted highly specialized studies in Tomography by Emission of Positrons / Computed Tomography (PET / CT), in the Hospital Angeles, supported by the UNAM. He has made several articles and oral presentations in the national congresses of both the Mexican radiology society and the Mexican Federation of Nuclear Medicine. In 2013 he was awarded a scholarship to Vienna, Austria, to the congress sponsored by the IAEA, with the work "Myocardial viability: Comparison between Talio / SPECT and FDG / PET studies".

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**EFFECTIVE AND PREVALENT MONITOR AND DIAGNOSIS
EVIDENCE, THE COMPUTER-AIDED ANALYSIS RANGE AND
LEVEL OF ELECTROCARDIOGRAM**

Name & Country

Jun Dong

China

Abstract

As classic, effective and prevalent monitor and diagnosis evidence, the computer-aided analysis range and level of Electrocardiogram (ECG), which is closely linked with public health, seriously influences physicians' service efficiency and hospitals' service quality. From the point of approximation ability of nonlinear function, we discuss the advantages and disadvantages of current feature extraction and classification algorithm on ECG analysis for the first time. A novel scheme which combining multiple relatively simple subprocesses is proposed to fulfil features recognition and diseases classification under the guide of simulating physicians' diagnosis thinking course and paying closing attention to implicit knowledge, while multi-level semi-supervised ensemble learning which is based on complementary Lead Convolutional Neural Networks (deep learning) and rules influence (knowledge engineering) is qualified for each subprocess. We intend to investigate several problems including judging signal quality, extracting key features, designing indirect diagnosis rule, designing distinguishing training method, and constructing Chinese cardiovascular diseases database used to test different algorithms. We will bring to light how to mine and formulation the experienced physicians' domain experience (especially implicit knowledge without being uttered). Therefore, case study for intelligence simulation research based on experience knowledge and its clinical application can be implemented, and practical means for effective and timely monitor and diagnosis of daily cardiovascular diseases in basic community medical unit will be ready.

Biography

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**IMPACT OF MOBILE HEALTH TECHNOLOGY ON BLOOD
PRESSURE REGULATION IN ADULTS WITH HYPERTENSION**

Name & Country

Kim Maher

Mexico

Abstract

Background: Despite widely published evidence-based guidelines for the prevention and treatment of high blood pressure, the prevalence of hypertension remains quite high. It is imperative health care providers employ novel blood pressure lowering strategies to prevent long-term cardiovascular and renal complications.

Purpose: An integrative review of current literature was performed to evaluate the impact of mobile health technology on blood pressure regulation for adults with hypertension.

Methods: A compilation of peer-reviewed randomized control trials, systematic reviews, feasibility study and large scale literature syntheses were analyzed. Fifteen studies were selected for this integrative review.

Results: Current literature revealed mobile health technology can improve blood pressure regulation. Six studies reported an average decrease of 7.3 mmHg in systolic blood pressure with the use of mobile health technology. Data supported use of mobile health to improve modifiable risk factors associated with hypertension such as smoking and medication adherence. Data was lacking on the cost effectiveness of mobile health technology. Two studies reported an increase in health care utilization with the use of mobile health technology. Healthcare provider management paired with mobile health technology showed positive outcomes.

Conclusion: Mobile health technology can aid in the blood pressure reducing strategies, reaching undeserved, high-risk populations, potentially reducing health care disparities.

Biography

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

LVAD BRIDGE FOR RECOVERY

Name & Country

Mustafa Alrefae

Saudi Arabia

Abstract

End-stage heart failure remains a leading cause of morbidity and mortality, advanced HF is a dynamic disease process not limited to volume status comorbidities exacerbating factors and prognosis. Treatment of stage D HF is limited to (i) mechanical circulatory support (ii) heart transplantation. Stage D HF refractory to medical therapy with limited donor heart availability. Recent advances in technology and outcomes with VADS have markedly changed the approach to advanced HF management. In a single cardiac centre in Saudi Arabia we perform seven cases of LVAD implantation for young patients aged between 20 to 46 with a diagnosis non-ischemic CMP. Case 1: 20 years old female CHF class IV refractory to medical therapy LVEF 10%, LVEDD 7.0cm, PCWP 25mmhg, Cardiac index 1.9 L/min/m², VO₂ max 11 mL/kg/min. LVAD heart mate II implanted. Regular follow up with TTE over one year. CHEF class improved from class IV to class I. LVEF improved from 10% to 60%.LVED reduced to 5cm, PCWP 12mmhg, Cardiac index more than 3 L/min/m², VO₂ max 16 mL/kg/min, so LVAD explanted. Case 2: 40 years old male with Chronic heart failure secondary to non-ischemic cardiomyopathy with LVEF 15%, narrow QRS complex, failure of medical therapy, LVAD implanted at our centre by regular follow up with TTE, LVEF improved from 15% to 55% over one year with recovery of LV function so LVAD explanted. Case 3: 36 years male diagnosed with dilated cardiomyopathy.LVEF 20% with repeated hospitalization so LVAD implanted with regular follow up with TTE. LVEF improved from 20%to 60% LVAD explanted after one year. In conclusion improvement in clinical and surgical expertise in LVAD has improved the quality of life in well selected patient with advanced heart failure with bridge-to-recovery. LVAD have shown promising results of improved functional capacity, quality of life and survival. Successful LVAD in advanced heart failure is crucially dependent on proper patient selection.

Biography

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**TIME SEQUENCE FUNCTIONAL STENT: A NOVEL CONCEPTION
AND CLINIC PRACTICE**

Name & Country

Nan Huang

China

Abstract

Restenosis and late thrombus formation are the most challenges to stent intervention. Drug release from a drug eluting stent (DES) is a very effective solution for suppressing restenosis, but increasing late thrombus rate is even dangerous because of over 50% of death rate. Recently, a stent consists of metal stent/titanium oxide film/drug eluting coating (mixture layer of the biodegradable polymer PLGA and rapamycin) produced by author's lab. has been applied in clinic in China. The two surface coating treated stent played multifunction anti-restenosis and thrombus resistance after stent intervention.. Clinic trial date showed that restenosis rate of the developed stent was as lower as 1.1%, and no late thrombus, however the late thombus rate of comparing stent was 2.1% during one year. And after four years the thrombus formed patients in comparing group were increased to 3.9%, and 3% patients in comparing group were die due to the late thrombus. However no late thrombus and no cardiac death were reported for the multilayer stent group. The stent intervention have applied on about 70,000 patients, the follow up investigation for one year with 2,000 patients revealed that the late thrombus,cardiac death rate, TLF, and MACE are 0.1%, 0.1%, 0.2%, 0.65% respectively, a order of magnitude lower than other commercial stent.

We proposed a novel conception: "time sequence functional stent", the stent which posses the functions that can always match the interaction of the stent with the biological environment of the host in the intervention time sequences can has the ability to suppress the complications in the clinic practice. This presentation discussed in detail about how the developed multilayer stent match the conception of time sequence functional stent, and the further development tendency of a stent according to the conception.

Biography

Professor Nan Huang has been the Chairman of the International Committee of Surfaces and the Interfaces of Biomaterials, and the Fellow of the International Union of Societies for Biomaterials Science & Engineering since 2007 and 2008 respectively. He was the Chairman or Co-Chair of 5 international conferences.. He published over 400 papers on the international journals , 50 piece of inventions, and presented over 30 times on international conferences as plenary speaker or keynote speaker. And he is an inventor of a stent with novel multifunction applied in clinic. His team is developing a new type of ventricular pump and thrombus filter cooperating with companies.

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

THE ROLE OF DOBUTAMINE DOSE ON THE CARDIAC PARAMETERS

Name & Country

Rabindra Nath Das

India

Abstract

Objectives: The report presents the effects of dobutamine dose on the cardiac parameters such as blood pressures (basal, systolic, diastolic & maximum), heart rates (basal, peak & maximum), baseline cardiac ejection fraction, ejection fraction on dobutamine dose.

Background: There is a little literature about the effects of dobutamine dose on the cardiac parameters.

Materials and Methods: The effects of dobutamine dose on the cardiac parameters have been examined based on a real echocardiography stress data set, collected at University of California, Los Angeles on 558 patients with 31 explanatory variables/ factors. The distribution of the considered cardiac parameters is gamma with non-constant variance. So, they have been analyzed by joint generalized linear gamma models.

Results: The mean basal blood pressure (BBP) decreases as the double product of maximum heart rate (MHR) & maximum blood pressure (MBP) at dobutamine dose (DPMAXDO) ($P < 0.001$) increases, while the variance of BBP increases as the DPMAXDO ($P < 0.001$) increases. The mean systolic blood pressure (SBP) increases as the dobutamine dose (DOSE) ($P = 0.032$) increases, while the mean SBP increases as the DPMAXDO ($P < 0.001$) decreases. The mean MBP increases as the DPMAXDO ($P < 0.001$) increases. The mean baseline cardiac ejection fraction (BEF) decreases as the DOSE ($P = 0.025$) increases. The mean ejection fraction on dobutamine dose (DOBEF) increases as the DOSE ($P = 0.011$) increases, while the variance of DOBEF increases as the dobutamine dose at maximum double product (DOBDSE) ($P = 0.001$) decreases. The mean basal heart rate (BHR) increases as the DPMAXDO ($P < 0.001$), or DOBDSE ($P = 0.074$) decreases. The mean peak heart rate (PHR), or maximum heart rate (MHR) increases as the DPMAXDO ($P < 0.001$) increases, while the variance of PHR, (MHR) increases as the DOBDSE ($P < 0.001$) decreases (increases). On the other hand, dobutamine dose is associated with many cardiac parameters such as SBP, MBP, new myocardial infraction (new MI), history of MI (hxofMI) etc.

Conclusions: Only the dobutamine dose effects are observed on SBP, MBP, DOBEF, newMI, histMI, etc, while the joint effects of dobutamine (DPMAXDO and DOBDSE) are observed on each cardiac parameters. The results are new inputs in the dobutamine dose study literature.

Biography

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

LESS INVASIVE HYBRID PROCEDURES IN CARDIAC SURGERY

Name & Country

Rainer Moosdorf

Germany

Abstract

In an elderly population, many patients are suffering from multiple and multilocular cardiovascular diseases. Age and multimorbidity are limits for conventional open heart surgery. New hybrid interventions are offering treatment options also for this growing group of patients: Patients with cerebrovascular disease and often status post stroke are frequently also suffering from degenerative aortic valve disease. In a specially developed hybrid procedure, a typical endarterectomy of the affected carotid artery, mostly under local anesthesia, is performed first and afterwards, via a vascular graft anastomosed to the patients common carotid artery, a catheterbased aortic valve replacement (TAVI) is added. All of our first 4 patients were discharged home without new neurologic pathologies. This procedure will be demonstrated in detail. Many elderly patients are referred to us for a TAVI procedure but preoperative investigations reveal further significant cardiac pathologies as coronary artery disease with severe left main or diffuse triple vessel involvement, further valvular disease or even congenital defects. In a novel hybrid approach, we address the other pathologies in a typical way and finally insert a TAVI valve under direct vision via a small mini aortotomy. So the aortic valve replacement does add no more than 10 minutes to the cross clamp time and such, even complex operations may be performed in very old and multimorbid patients with a reasonable risk, as to be seen in more than 20 patients of our group.

Conclusion: With new hybrid approaches, even complex cardiovascular pathologies in elderly and multimorbid patients can be treated with an acceptable risk and good results.

Biography

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**ALCOHOL CONSUMPTION AND GENDER GAP IN
CARDIOVASCULAR DISEASE MORTALITY IN RUSSIA**

Name & Country

Razvodovsky Y.E

Russia

Abstract

Background: A great deal of evidence indicates that higher level of alcohol consumption has been implicated both in the high cardiovascular disease (CVD) mortality and its dramatic fluctuations during the recent decades in Russia. This evidence suggests that alcohol may play an important role in explaining the pronounced gender gap in CVD mortality in Russia.

Objective: This study aims to test the hypothesis of the close aggregate level link between alcohol consumption and gender difference in CVD mortality rates in Russia using data on sex-specific CVD mortality rates and alcohol consumption per capita between 1956 and 2010.

Method: Time-series analytical modeling techniques were used to examine the relation between the gender difference in CVD mortality and trends in alcohol consumption per capita. **Results:** The results of the analysis suggest that 55.3 % of the difference in CVD mortality rates between males and females in Russia could be attributed to alcohol.

Conclusions: The outcomes of this study provide indirect support for the hypothesis that alcohol is a major contributor to the high gender gap in CVD mortality and its dramatic fluctuations in Russia during the last few decades.

Biography

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

PREVALENCE OF HUMAN IMMUNODEFICIENCY VIRUS, CLINICAL PRESENTATION AND RELATED FACTORS AMONG ADULT PATIENTS WITH HEART FAILURE AT JAKAYA KIKWETE CARDIAC INSTITUTE

Name & Country

Samwel Jacob Rweyemamu

Tanzania

Abstract

Patients with heart failure are not exempted from HIV infection. Previously report from South Africa showed that about 10% of hospitalized patients with CVD and heart failure had HIV infection. In Tanzania 5% of all adults are positive for HIV infection. The data on the magnitude of HIV among patients with heart failure in most parts of the world including Tanzania are scanty. The aim of this study was to determine the prevalence of HIV, clinical presentation and related factors among patients with heart failure at JKCI. A cross-sectional hospital based study involving 523 adults with heart failure at JKCI was carried out from September 2016 to January 2017. Framingham score of two or more was used to confirm the presence of heart failure. HIV testing was done on 523 patients by the use of SD Bioline and Unigold cartridges. For a patient to be defined as HIV positive, both Bioline and Unigold tests have to be positive. For the discordant results a confirmatory ELISA test was done. A structured questionnaire was used to extract demographic data, record blood pressure and respiratory rate, serum creatinine, lipid profile, random blood glucose, hemoglobin level and clinical characteristics. Logistic regression mode was used to determine the associated factors and P value < 0.05 was considered as statistically significant. A total of 523 adult patients with heart failure were studied and the prevalence of HIV infection was found to be 5 %. HIV infection was more prevalent among patients aged 40-64 years (6.8%), female (6.7%) and widow/divorce/separated (11%). Heart failure was found to be significantly advanced among those who tested HIV positive compared to HIV negative individuals (NYHA IV 57.7% vs. 19.9% non-HIV (p<0.001). Furthermore anemia, dilated cardiomyopathy and pericardial effusion were significantly more prevalent among those with HIV infection than those with no HIV infection. The respective proportions were 61.5% vs. 22.1%, 79.9% vs. 41.3%, 53.9% vs. 27.2% and 15.4% vs. 4.4% (p<0.001). On an adjusted basis, widow/divorce/separated, anemic patients with heart failure and those with New York Heart Association functional class IV (NYHA IV) had significantly elevated odds of at least 3 for HIV infection.

Biography

Samwel Jacob Rweyemamu completed master of medicine in internal medicine at the age of 47 years from Muhimbili University of health and allied sciences (MUHAS Tanzania). Currently, I am a student at South Wales University (UK) undertaking a post graduate Diploma in Preventive Cardiovascular Medicine online. I am a physician at Jakaya Kikwete Cardiac institute and assistant lecturer at Kampala International University (KIU) Tanzania. I have published 2 papers in reputable Journals and made presentations in our local conferences. The manuscript of a case report is just uploaded recently to the clinical research Open Access journals and probably will be published soon.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

ACE PHENOTYPING AS A GUIDE FOR PERSONALIZED THERAPY WITH ACE INHIBITORS

Name & Country

Sergei M. Danilov

Russia

Abstract

Angiotensin-converting enzyme (ACE) inhibitors (ACEI) used widely in the management of cardiovascular diseases, but with significant inter-individual variability of the patient's response. We tried to understand whether inter-individual variability in the response to ACE inhibitors can be explained by the "ACE phenotype"- e.g. variability of plasma ACE concentration, activity, and conformation and/or the degree of ACE inhibition in each individual. Novel approach that we introduced (ACE phenotyping) includes: 1) measuring plasma ACE activity with two substrates (HHL and ZPHL); 2) calculating the rates of substrate hydrolysis (ZPHL/HHL ratio); 3) detection of ACE inhibitors in patient's blood (indicator of patient compliance) and the degree of ACE inhibition (i.e. adherence); 4) quantification of plasma ACE protein concentration and the nativity of ACE conformation by evaluating the pattern of binding of monoclonal antibodies to 16 different epitopes on the N and C domains of ACE. ACEI effectively reduced systolic and diastolic blood pressure in most patients, however 20% of patients considered non responders. Chronic treatment results in 40% increase in serum ACE concentrations, likely due to dissociation of bilirubin (in a complex with lysozyme) from complex with ACE, induced by binding of ACEI to the active centers of ACE. This dissociation increased flexibility of ACE molecule on the plasma membrane and thus, increased in ACE shedding. There was a trend towards better response to ACEI among patients who had a higher plasma ACE level. However due to the fact that 20% of patients do not respond to ACEI by blood pressure drop, the initial blood ACE level could not be a predictor of blood pressure reduction in an individual patient. Nevertheless, ACE phenotyping provides important information about conformational and kinetic changes in ACE of individual patients and this could be a reason for resistance to ACE inhibitors in some non-responders. In particular, a novel kinetic parameter that we introduced, ZPHL/HHL ratio, allows to detect (blindly) ACE inhibitors in the patient's blood and the degree of ACE inhibition in individual patients. The application of this approach, actually monitoring of antihypertensive adherence, already allowed distinguish true versus pseudo-resistant hypertension (Jones et al. 2017).

Biography

Sergei M. Danilov, MD has completed his PhD at the age of 28 years and Doctor of Sciences at the age of 42 years from Cardiology Research Center in Moscow (Russia). Then he worked in INSERM (Paris, France) with a team that cloned ACE gene (F. Alhenc-Gelas, F. Soubrier, P. Corvol). After that he established lab on ACE biology in the University of Illinois at Chicago. During these years his team generated more than 40 mAbs to different epitopes of Angiotensin-Converting Enzyme and performed complete epitope mapping of these mAbs. The results of this mapping allowed him to establish novel method – conformational fingerprinting of ACE using monoclonal antibodies, that lead to new concept - tissue specificity of ACE. This method, conformational fingerprinting of ACE, along with introducing a novel kinetic parameter for human ACE, allowed him to establish novel approach - complete ACE phenotyping, which has a clinical obvious clinical perspectives. He has published more than 160 papers on ACE biology in reputed journals.

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**CLINICAL RESEARCH AND APPLICATION OF NEW TECHNIQUE
ABOUT ABDOMINAL CARDIOPULMONARY RESUSCITATION**

Name & Country

Sisen Zhang

China

Abstract

External chest compression cardiopulmonary resuscitation (CPR) is currently the primary treatment for cardiac arrest. After more than 50 years of clinical practice, the return of spontaneous circulation (ROSC) has been improved to a certain extent, but the survival rate of patients discharged from hospital is still not ideal. The reason is that: Some cases have chest compressions contraindication, some are prone to the fracture of the chest ribs during chest compression, and chest compression cannot be combined with artificial circulation and respiration, which seriously affects ROSC rate. In order to improve the ROSC rate of cardiac and respiratory arrest, it is imperative to popularize the abdominal CPR. Professor LX Wang put forward a new theory of abdominal CPR through repeated basic and clinical studies, and invented a abdominal lifting and compression CPR instrument, and the results of clinical application study are of great academic recognition. As the director of phase III clinical trials, Zhengzhou people's Hospital was the first to conduct clinical research in dozens of large hospitals in China. In the past three years, Under the leadership of Professor SS Zhang, the research team in the hospital has rescued more than 100 patients, with a success rate of about 22.5%, and published three international and more than ten Chinese series papers, including the world's first paper on the second district of SCI-JCR, and his project has been approved as a provincial and municipal key scientific research project, and won the first prize of provincial and municipal science and technology progress award; Given the outstanding achievements in abdominal CPR, Professor SS Zhang was approved as a doctoral tutor in emergency and critical medicine at Southern Medical University. With the support of the Chinese government, he established the China Central Plains Institute of Cardiopulmonary brain Resuscitation, which consists 6 specialized laboratories and 6 research branches, including the First Affiliated Hospital of Zhengzhou University and the First Affiliated Hospital of Henan University, which form a clinical research network of abdominal CPR covering the whole province, and also laid a good foundation for the clinical research and application.

Biography

Sisen Zhang, Doctor of medicine, chief physician, famous emergency medical expert and the first time Chinese medicine outstanding demeanor award winner, enjoys the first batch of government special allowance experts, the national outstanding science and technology worker, the Chinese research hospital outstanding young and middle-aged expert, Henan Province health science and technology innovation talented person, Doctoral Tutor of Southern Medical University in Emergency and critical Care Major, Director of the China Central Plains Institute of Cardiopulmonary brain Resuscitation, Vice president of Zhengzhou People's Hospital, Henan Province, China, Visiting Scholar of Peking University and Royal College, UK. He has presided over or participated in more than 10 projects of the National Natural Science Foundation, national key R & D projects, provincial and ministerial science and technology projects benefiting the people, provincial and municipal key scientific and technological projects, and published nearly 100 academic papers, eight new utility patents and three monographs. He has published more than 10 SCI papers and has been serving as an editorial board member and standing member. As the first complete person, he has won 12 scientific achievements awards, including provincial and ministerial second prize, provincial medical science and technology progress first prize and so on.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**HOSPITAL OUTCOME OF ACUTE HYPERGLYCEMIA AND TNF- α
IN PATIENTS WITH ST-ELEVATION MYOCARDIAL INFARCTION**

Name & Country

Taha Ahmed Al-Maimoony

Egypt

Abstract

Aims: To test whether hyperglycemia and inflammation detected in patients with acute ST-elevation myocardial infarction (STEMI) is a predictor of in-hospital major adverse cardiovascular events (MACEs).

Methods: 81 patients with an acute STEMI were enrolled in this clinical study. The studied patients were classified into 3 groups, group I included patients with a plasma glucose (< 200 mg/dl) and no previous history of diabetes, group II included diabetic patients with hyperglycemia and group III included patients with hyperglycemia and no history of diabetes. Tumor necrosis factor alpha (TNF- α), white blood counts (WBCs), and their subtypes were analyzed during hospitalization. The primary end point was the composite of mortality, arrhythmia, recurrent nonfatal MI, or heart failure (MACEs) during the hospital stay.

Results: Compared with the other groups, group III patients had significantly higher plasma levels of cardiac biomarkers (Troponin I and CK-MB) and inflammatory markers (TNF and WBCs, $p < 0.01$) while MACEs developed more among groups II and III groups. Seventeen (21.8%) patients suffered MACEs (mortality in six patients, heart failure in thirteen patients, re-infarction in three patients, atrial fibrillation in three patients and one patient developed heart block. TNF α level, Troponin I and the left ventricular ejection fraction were the most independent predictors of the MACEs after acute STEMI.

An admission cutoff value of blood glucose level > 230mg/dl cut-off showed sensitivity of 76.5% and specificity of 63.9% as predictor of MACEs.

Conclusion: Hyperglycemia is an important predictor of the outcome in patients hospitalized with acute STEMI. Hyperglycemia is associated with increased levels of inflammatory markers and cardiac biomarkers. TNF α concentrations and hyperglycemia correlated with left ventricular ejection fraction. Inflammatory markers such TNF- α and WBCs counts alone or in combination are strong and independent predictors of outcome in patients with STEMI.

Biography

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

STANDARD VERSUS ABDOMINAL LIFTING AND COMPRESSION CPR

Name & Country

VivianLiu

China

Abstract

Background: This study compared outcomes of abdominal lifting and compression cardiopulmonary resuscitation (ALP-CPR) with standard CPR (STD-CPR).

Materials and Methods: Patients with cardiac arrest seen from April to December 2014 were randomized to receive standard CPR or ALP-CPR performed with a novel abdominal lifting/compression device. The primary outcome was return of spontaneous circulation (ROSC).

Results: Patients were randomized to receive ALP-CPR (=40) and STD-CPR (=43), and the groups had similar baseline characteristics. After CPR, 9 (22.5%) and 7 (16.3%) patients in the ALP-CPR and STD-CPR groups, respectively, obtained ROSC. At 60 minutes after ROSC, 7 (77.8%) and 2 (28.6%) patients, respectively, in the ALP-CPR and STD-CPR groups survived (=0.049). Patients in the ALP-CPR group had a significantly higher heart rate and lower mean arterial pressure (MAP) than those in the STD-CPR group (heart rate: 106.8 versus 79.0, $p < 0.001$; MAP: 60.0 versus 67.3 mmHg, $p = 0.003$). The post-treatment PCO₂ was significantly lower in the ALP-CPR group than in the STD-CPR group (52.33 versus 58.81, $p = 0.009$). PO₂ was significantly increased after ALP-CPR (45.15 to 60.68, $p < 0.001$), but it was not changed after STD-CPR. PO₂ after CPR was significantly higher in the ALP-CPR group (60.68 versus 44.47, $p < 0.001$). There were no differences between genders and for patients who are >65 or ≤ 65 years of age.

Conclusions: The abdominal lifting and compression cardiopulmonary resuscitation device used in this study is associated with a higher survival rate after ROSC than standard CPR.

Biography

Vivian Liu has completed her PhD at the age of 30 years from Southern Medical University (China), major in Biochemistry & Molecular Biology. Now she is the director of Research Administration & International Collaboration of People's Hospital Affiliated to Henan University of Chinese Medicine (also known as Zhengzhou People's Hospital). She has published 3 papers on oral cancer in English and Chinese. As one of the new members in team, she is trying to make abdominal lifting and compression CPR well known around the world.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

RELATION BETWEEN BRONCHIAL ASTHMA AND PARASITIC (NEMATODES) INFECTION IN EGYPTIAN CHILDREN

Name & Country

Mohammed Y

Egypt

Abstract

BACKGROUND: Among the many factors influencing the prevalence of asthma in developing countries from the tropics are geo-helminthic infections.

AIMS: This work aims to study the relation between bronchial asthma and parasitic infestation in Egyptian children.

PATIENTS AND METHODS: A cross-section, analytical study design was chosen to perform this research on 100 school aged children. All children were interviewed and examined clinically and laboratory.

SETTING: Alexandria Police Hospital.

RESULTS: 86% of patients with bronchial asthma lived in urban areas, while 64% of patients with parasitic infestation lived in rural areas. Statistically significantly Negative correlations were found between blood level of IgE and FEV1% of predicted in patients with bronchial asthma as well as patients with parasitic infestation with $r = -0.381$, -0.325 at $p = 0.006$, 0.021 respectively. Inverse relationship was found between blood level of IgE and FEV1/FVC% in patients with parasitic infestation with $r = -0.358$ with statistical significant difference at $p = 0.011$.

CONCLUSIONS: Statistically significance higher values of IgE were found in patients with parasitic infestation compared to patients with bronchial asthma. It was noted that patients with combined bronchial asthma and parasitic infestation demonstrated statistically significance higher values of IgE which suggest a possible synergistic effect of two diseases.

RECOMMENDATION: Improving personal and environmental hygiene and regular screening, treatment and health education for children as regard parasitic infections is recommended.

Biography

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

CABG IN DIFFUSE CORONARY ARTERY DISEASE

Name & Country

Shyam K Ashok

India

Abstract

Statement of the problem: In India 2.78 million death are due to Cardiovascular diseases of which 50 % are due to CAD. Peculiarities of CAD patterns in Indian patients- Younger age at presentation, high incidence of DVD and TVD, diffuse involvement, distal disease and significant LV dysfunction at presentation

Diffuse CAD: Length of significant stenosis > 20 mm, multiple significant stenosis (> 70% narrowing) in the same artery separated by segment of apparently normal vessel and significant narrowing involving the whole length of coronary artery.

Methodology: We in our institute, perform OP CAB and use LIMA and veins as conduits to perform the surgery. Once the conduits are harvested, we heparinize with I.V. Heparin 3 mg/Kg given to achieve an ACT >300. Using the octopus as stabilizer, we perform an endarterectomy of the LAD first and then use a vein patch to cover the defect. LIMA is then used to anastomose the LAD on the vein patch. Veins are used to bypass the LCX and RCA, as deemed appropriate. The proximal ends of the vein grafts are anastomosed to Ascending Aorta with side clamp and heart beating. Intra op we start Lomodex infusion 20ml/hr which is continued for 24 hours and the inotropes used are Adrenaline and Dobutamine as and when necessary. Postoperatively aspirin 75mg is given and Heparin infusion started after 6 hours to maintain ACT of around 150 for 24 hours. Patients are usually extubated after 4 hours provided they are hemodynamically stable. Anticoagulation by Acitrom is commenced orally from day 1 to maintain an INR of 2 for 3 months.

Result: Out of the 20 patients in last 18 months outcomes have been excellent with no in-hospital mortality or cerebrovascular incidents.

Conclusion: Off pump CABG with coronary end-arterectomy offers a good solution to the problem of diffuse coronary artery disease.

Biography

After completing his MBBS and MS in General Surgery, he did his Mch in CVTS from Seth GS Medical College, Mumbai in 2008. He later joined Narayana Hrudayalaya, Bangalore in 2008, which a 1000 bedded hospital executing close to 600 open heart surgeries in a month. He worked as a Fellow in Adult Cardiothoracic department in Royal Melbourne Hospital, Australia, which is the second largest Cardiothoracic unit in the whole of Australia. After working in Australia for 2 years he rejoined Narayana Hrudayalaya, as Consultant Cardiothoracic Surgeon in 2012 and worked there till 2015. He has independently performed about 1000 open heart surgeries, consisting of Coronary Artery bypass surgeries and Valve Replacements. His area of interest is Coronary Artery bypass, especially Total Arterial Revascularization. He joined Aster CMI Hospital in Feb 2016 as Consultant Cardiothoracic Surgeon.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

MINERALOCORTICOID RECEPTOR ANTAGONISM: MEW OPPORTUNITIES FOR CARDIOVASCULAR RESEARCH

Name & Country

Bertram Pitt

USA

Abstract

Frequent premature ventricular complexes (PVC) are related to reversible tachycardia-induced cardiomyopathy. However, the role of arrhythmia burden on the outcome of the catheter ablation has not been fully recognized.

Aim: The aim of this study was to assess the effect of catheter ablation and PVC burden in patients with and without structural heart disease (SHD) on left ventricular ejection fraction (LVEF).

Methods: Transthoracic echocardiography was done before and six months after radiofrequency catheter ablation in 109 consecutive patients (61 men, age 55 ± 17 years) with frequent PVCs. Sixty-five (59.6%) patients had underlying SHD. **Results:** The catheter ablation procedure was successful in 93 (85.3%) patients. Baseline PVC burden was higher in patients with SHD ($22,267 \pm 12,934$) compared to those without concomitant SHD ($15,546 \pm 7888$), $p = 0.005$. Nevertheless, patients with $LVEF \leq 50\%$ at baseline presented greater LVEF recovery (from 44% to 56%) than those with $LVEF > 50\%$ at baseline after catheter ablation. In both groups, the LVEF improved ($p < 0.001$); however, no difference was observed between patients with SHD ($5.7\% \pm 1.37\%$) and without ($4.6\% \pm 0.96\%$) SHD; $p = 0.89$. PVC burden was higher in patients with ($24,350 \pm 2776$ PVC/day) compared to those without ($17,588 \pm 1970$ PVC/day) improvement of LVEF. In multivariate regression analysis PVC burden $> 20,000$ /day (but not age, $p = 0.95$; gender, $p = 0.89$; presence of SHD, $p = 0.53$; QRS complex width of the treated PVC, $p = 0.21$, LVEF before ablation, $p = 0.19$; and site of origin, $p = 0.47$) predicted improvement in LVEF after successful catheter ablation (odds ratio: 3.53; 95% confidence interval: 1.15–10.75; $p = 0.023$).

Conclusions: Catheter ablation of frequent PVCs improves left ventricular function and in multivariate analysis predicted improvement of LVEF within six months after the successful catheter ablation procedure in patients with PVC burden exceeding 20,000/24 h.

Biography

Dr. Bertram Pitt completed his MD at the University of Basel, Switzerland in 1959. He completed his cardiology training at the Johns Hopkins University School of medicine in 1966 and remained on the faculty there until 1977 when he joined the University of Michigan school of Medicine as Professor of medicine and director of the division of cardiology, He is currently Professor of medicine emeritus and has received life time achievement awards from the heart failure society of America and the European heart failure society.

SESSIONS

June 18-19, 2018

Cardiac Nursing | Pediatric Cardiology | Heart Arrhythmia | Heart and obesity |
Diabetes and Stroke | Nuclear Cardiology | Cardio oncology | Stem Cell Research
On Heart | Silent Ischemia and Ischemic Heart Disease

Session Introduction

- Title:** Radiofrequency Catheter Ablation Of Frequent Premature Ventricular Complexes Influences Left Ventricular Function
Agnieszka Wojdyla-Hordynska, Poland
- Title:** Nuclear Cardiology Practices In Brazil: Challenges To Improve Radiation Exposure On The Emerging Countries
Carlos Vitor Braga Rodrigues, Brazil
- Title:** Changes In The Systemic Inflammatory Response And Renal Filtration Functions Using A Closed Circuit Of The Artificial Circulation With Coronary Artery Bypass Grafting
Damir B, Kazakhstan
- Title:** Radiation Protection For Patient And Staff In Interventional Procedure
Ndagire Hadijah, Uganda
- Title:** Patient Centered Myocardial Perfusion Imaging
Herrera, Yariela, Mexico
- Title:** Imaging Of The Coronary Artery Diseases In Women
Ma. Amparo Pineda Tovar, Mexico
- Title:** Prognostic Value Of Heart Failure In Hemodialysis-Dependent End-Stage Renal Disease Patients With Myocardial Fibrosis Quantification By Extracellular Volume On Cardiac Magnetic Resonance Imaging
Hua-Yan Xu, China
- Title:** Evaluation Of [64Cu]Pyruvaldehyde-Bis (N4-Methylthiosemicarbazone) An Attractive Radiopharmaceutical For Myocardial Perfusion For Pet
Juan C. Manrique Arias, Mexico
- Title:** Restrictive Heart Remodeling After Complex Therapy Of Breast Cancer
Natallia Maroz-Vadalazhskaya, Belarus
- Title:** Using Smart Ecg T-Shirt With Ai Based Arrhythmia Detection
Oleksii Vynogradov, USA
- Title:** Early Detection Of Anthracycline Induced Cardiotoxicity In Childhood Acute Leukemia With Cardiac Magnetic Resonance
Ying-Kun Guo, China
- Title:** Nci: Nuclear Cardiology: Challenges, Problems And Solutions
Ao Osman, Sudan
- Title:** Study On The Dose Evaluation Variation Of Left Ventricular Myocardial And Left Anterior Descending Induced By Heartbeat In Left Breast Carcinoma Radiotherapy
Qian Li, China
- Title:** Dyslipidemia, Microcirculation Dysfunction And Heart Failure In Patients With End-Stage Renal Disease Undergoing Dialysis
Rong Xu, China
- Title:** Early Detection Of Anthracycline Induced Cardiotoxicity In Childhood Acute Leukemia With Cardiac Magnetic Resonance
Ying-Kun Guo, China

SESSIONS

June 18-19, 2018

Clinical Cardiology | Cardiomyopathy and Heart Failure | Heart Diseases and Risk Factors | Cardiac Diagnosis | Cardiac Regeneration | Cardiac Surgery

Session Introduction

Title: The Cause Of Cancer From The Point Of View Of The New Theory Of Cvd

Vladimir Ermoshkin, Russia

Title: Early Quantitative Assessment Myocardial Deformation Of Isolated Left Ventricular Noncompaction In Patients With Normal Ejection Fraction Using Cardiac Magnetic

Rong Xu, China

Title: Prevalence Of Coronary Artery Disease Detected By Myocardial Perfusion Scintigraphy In Patients Of Essential Hypertension With Or Without Diabetes Mellitus

Owais Qadeer Gill, Pakistan

Title: Another View On Mechanism Of Heart Failure And Cancer

Vladimir Ermoshkin, Russia

Global Cardiology Congress 2018

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**RADIOFREQUENCY CATHETER ABLATION OF FREQUENT
PREMATURE VENTRICULAR COMPLEXES INFLUENCES LEFT
VENTRICULAR FUNCTION**

Name & Country

Agnieszka Wojdyla-Hordynska

Poland

Abstract

Frequent premature ventricular complexes (PVC) are related to reversible tachycardia-induced cardiomyopathy. However, the role of arrhythmia burden on the outcome of the catheter ablation has not been fully recognized.

Aim: The aim of this study was to assess the effect of catheter ablation and PVC burden in patients with and without structural heart disease (SHD) on left ventricular ejection fraction (LVEF).

Methods: Transthoracic echocardiography was done before and six months after radiofrequency catheter ablation in 109 consecutive patients (61 men, age 55 ± 17 years) with frequent PVCs. Sixty-five (59.6%) patients had underlying SHD. **Results:** The catheter ablation procedure was successful in 93 (85.3%) patients. Baseline PVC burden was higher in patients with SHD ($22,267 \pm 12,934$) compared to those without concomitant SHD ($15,546 \pm 7888$), $p = 0.005$. Nevertheless, patients with $LVEF \leq 50\%$ at baseline presented greater LVEF recovery (from 44% to 56%) than those with $LVEF > 50\%$ at baseline after catheter ablation. In both groups, the LVEF improved ($p < 0.001$); however, no difference was observed between patients with SHD ($5.7\% \pm 1.37\%$) and without ($4.6\% \pm 0.96\%$) SHD; $p = 0.89$. PVC burden was higher in patients with ($24,350 \pm 2776$ PVC/day) compared to those without ($17,588 \pm 1970$ PVC/day) improvement of LVEF. In multivariate regression analysis PVC burden $> 20,000$ /day (but not age, $p = 0.95$; gender, $p = 0.89$; presence of SHD, $p = 0.53$; QRS complex width of the treated PVC, $p = 0.21$, LVEF before ablation, $p = 0.19$; and site of origin, $p = 0.47$) predicted improvement in LVEF after successful catheter ablation (odds ratio: 3.53; 95% confidence interval: 1.15–10.75; $p = 0.023$).

Conclusions: Catheter ablation of frequent PVCs improves left ventricular function and in multivariate analysis predicted improvement of LVEF within six months after the successful catheter ablation procedure in patients with PVC burden exceeding 20,000/24 h.

Biography

Agnieszka Wojdyla-Hordynska, 39 years old, has completed her Medical Doctor at the age of 26 years in Silesian University (Poland), she has reached an MBA degree in Health Care Management in 2012 in University Opole, Poland, successfully finished her cardiology and interventional electrophysiology training in 2013, started her PhD studies in Silesian University in 2017. She is an older assistant doctor in the Clinical Cardiology Department and Electrophysiology Laboratory of University Hospital Opole in Poland. In the years 2010-2011 she has been awarded by EHRA a clinical electrophysiology fellowship in HZL, Leipzig, Germany. She has published in reputed impacted polish and international journals. She proceeds her research in ventricular arrhythmias and means of ablation, as well as devices and heart failure management. She is a skilled operator, interventional electrophysiologist and device implanting doctor.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

CHANGES IN THE SYSTEMIC INFLAMMATORY RESPONSE AND RENAL FILTRATION FUNCTIONS USING A CLOSED CIRCUIT OF THE ARTIFICIAL CIRCULATION WITH CORONARY ARTERY BYPASS GRAFTING

Name & Country

Carlos Vitor

Kazakhstan

Abstract

Myocardial Perfusion Imaging (MPI) represents more than 55% of the tests performed in Brazil. However the techniques are heterogeneous among the Nuclear Medicine Services (NMS). The International Atomic Energy Agency (IAEA) promoted the research "IAEA Nuclear Cardiology Protocols Survey" (INCAPS), which recommended eight "best practices" to evaluate and minimize patient exposure to ionizing radiation during the MPI. Important concepts about radioprotection must be taken into account because of the risks regarding the ionizing radiation. The quality of a MPI is not limited only in diagnosis, the concern about the amount of radiation used is closely related. According to the parameters adopted by INCAPS, a considerable number of NMS in Brazil do not follow the best practices recommended by the IAEA. We observed that the recommendations evolving Thallium-201 are the most respected, different from another countries, the preferred protocol is using Technetium-99m. Worldwide there are great efforts to reduce the radiation used in patients on diagnostic imaging and on the nuclear cardiology field, a protocol recommended to reach this objective is the Stress-Only. Unfortunately, we faced resistance to implement this in our reality and it is the worst index observed in this study (94% of the NMS do not use). The main problem it's the reimbursement of the Health Insurance Provider, the payment is separated (rest and stress), the NMS need to do both to receive full refund. Another difficulty frequently encountered is the use of strategies to reduce the radioactive doses. This best practice it is closely related with high-technology hardware and the economy model used in Brazil does not facilitate the entry of imported equipment. The tributes and devaluation of money do not stimulates new acquisitions. Despite the difficulties faced in some regions, some observed deficits can be resolved without any costs, highlighting the importance of developing strategies for adherence of best practices. In Brazil, we are engaged to change this reality and promoting projects to show the benefits after reduce the radiation exposure during MPI.

Biography

Carlos Vitor is specialist in Diagnostic Imaging and Radioprotection, has completed his master's in Cardiovascular Sciences in the Nuclear Medicine and Molecular Image field. He is visitor professor and PhD Student at the Federal Fluminense University (UFF). He has experience in Nuclear Medicine practices and Radiation Exposure.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

CHANGES IN THE SYSTEMIC INFLAMMATORY RESPONSE AND RENAL FILTRATION FUNCTIONS USING A CLOSED CIRCUIT OF THE ARTIFICIAL CIRCULATION WITH CORONARY ARTERY BYPASS GRAFTING

Name & Country

Damir B

Kazakhstan

Abstract

The objective of this report was to study the direct results of cardiopulmonary bypass surgery in conditions of cardiopulmonary bypass in closed and open circuits.

Methods: 2 cohorts of patients underwent coronary artery bypass grafting using open and closed CPB contours. Patients in group 1 (n = 50; mean age 65 \pm 4,2 years) underwent coronary artery bypass grafting in the closed CPB contour. Patients in group 2 (n = 50; mean age 64 \pm 5,3 years) underwent coronary artery bypass grafting in the open CPB contour. Clinical characteristics of both cohorts were comparable. The total time of cardiopulmonary bypass was lower in the 1-st group than in the 2-nd group (58min \pm 12,7 and 64min \pm 16,9, respectively; p = 0,04). The average number of grafts was 3 \pm 0,67 in the control group, 3 \pm 0,53 in the comparative group. Postoperative analysis of laboratory indicators has been divided into 2 stages at the time of six hours and sixteen hours.

Results: When comparing two groups on the expiration of 6 hours after operation level of leucocytes, platelets, C-reactive protein, urea and creatinine has not undergone a significant difference. After 16 hours of operation, the level of leucocytes was 10x10⁹ \pm 13,2 and 11,3x10⁹ \pm 2,4 (p= 0,02) respectively; the level of C-reactive protein was 4mg/dl \pm 2,8 and 5,6 mg/dl \pm 2,2 (p=0,01) respectively. There were no statistically significant changes in urea and creatinine levels in both groups.

Conclusion: The closed contour of cardiopulmonary bypass can be used effectively and safe for coronary artery bypass grafting surgery.

Biography

Damir B is the cardiac surgeon of JSC "National Scientific Cardiac Surgery Center", Astana. He works on PhD on the topic of optimizing the use of the closed contour of the artificial circulation in aortocoronary bypass grafting. He has completed National medical University at the age of 21 years from Kazakhstan. In 2010 he graduated from the National Surgery Center. 01/10/2010–20/09/2011 he worked as an interventional cardiologist in National Research Institute of Cardiology and Internal Diseases, Almaty. In 2017 he was trained in Lithuania for biostatistics. He has over 30 publications.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**RADIATION PROTECTION FOR PATIENT AND STAFF IN
INTERVENTIONAL PROCEDURE**

Name & Country

Ndagire Hadijah

Uganda

Abstract

BACKGROUND : Ionizing radiation is used extensively in cardiac diagnostic and interventional procedures. The radiation is associated with a small but definite stochastic risk of inducing a malignant disease. Low-dose radiation exposure has been shown to induce an increase in the number of circulating lymphocytes and chromosome aberrations, which represent surrogate biomarkers of cancer risk. The long-term cancer risk increases with increasing cumulative dose, there is no known threshold value. Deterministic risk of skin damage both to the patient and the operator, risk of eye injury to the operator, risk by radiation exposure to the operator as many procedures are carried out in a year over 700 interventional. The radiation dose received by cardiologists during interventional procedures and other cardiology procedures can vary by more than an order of magnitude for the same type of procedure and for similar patient doses. This paper will analyze occupational radiation protection for physicians and other staff in the interventional suite.

Methodology: The radiation exposure in interventional cardiology is determined by a series of factors that are partly administered by each procedure and partly dependent on the conduct of the operator and other personnel. The radiation management by the operator is the most important modifiable factor in radiation protection when using given equipment. Simple methods for reducing or minimizing occupational radiation dose include: minimizing fluoroscopy time and the number of acquired images, using available patient dose reduction technologies, using good imaging-chain geometry, collimating; avoiding high-scatter areas, using protective shielding, using imaging equipment whose performance is controlled through a quality assurance programme, and wearing personal dosimeters so that you know your dose. Effective use of these methods requires both appropriate education and training in radiation protection for all interventional cardiology personnel, and the availability of appropriate protective tools and equipment. Regular review and investigation of personnel monitoring results, accompanied as appropriate by changes in how procedures are performed and equipment used, will ensure continual improvement in the practice of radiation protection in the interventional suite

Conclusion: Reducing radiation exposure during interventional procedure is of paramount importance for both patients and staff safety. Advances in equipment and application of radiation safety protocols have significantly reduced patient doses and operator exposures

Biography

Ndagire Hadijah completed her Masters in Medical Physics at the age of 28 years from University of Cape Town attached to Groote Schuur Hospital. She is a medical Physicist in diagnostic radiology and at Uganda Heart Institute Mulago Hospital practicing Medical Physicist

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

PATIENT CENTERED MYOCARDIAL PERFUSION IMAGING

Name & Country

Yariela Herrera

Mexico

Abstract

Just like in many other medical fields, Nuclear Cardiology's practice is aiming to shift to a patient centered attention, where the laboratories will focus on value based care rather than a volume based one. In the 1990's and the past decade a 2.5 increase in Myocardial Perfusion Imaging (MPI) volume raised awareness of the incremental in radiation burden that was not necessarily impacting health care outcomes. Since then, efforts have been made to provide a more personalized care to meet the patient's real necessities. In order to achieve the six core needs of Health care identified by the Institute of Medicine, Nuclear Cardiology laboratories can provide better care by assuring Patient safety; this process can be achieved by first of all, identifying the candidates that will benefit from imaging, Appropriateness Criteria for Nuclear Cardiac imaging Procedures has been published to support the referring an nuclear physicians. Also, empowering the patient, providing proper education and informed consent of the nuclear cardiac imaging procedures will improve health care. Last, but not least, the nuclear physician must considered the MPI protocol that best fits the patient's needs and not believe that "one size fits all". Taking the patient's condition in consideration will allow to decrease the radiation activity administered, to achieve better quality images that will support the referring clinician in the best next step in the patient's management.

Biography

Dr. Yariela Herrera is a panamenian nuclear medicine physician. She earned her medical doctor degree at Panama's University Medical School. She completed her Internal Medicine Specialty at Hospital Santo Tomás. Later she performed her Nuclear Medicine fellowship at the School of Medicine and Health Sciences of El Colegio Mayor Nuestra Señora del Rosario, located in Bogota, Colombia. She conducted her training at La Fundación Cardioinfantil – Instituto de Cardiología. She is the Chief of Nuclear Medicine at Novalis Treatment Center in Panama Pacífica Hospital and a Nuclear Medicine physician in Santo Tomás Hospital.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

IMAGING OF THE CORONARY ARTERY DISEASES IN WOMEN

Name & Country

Ma. Amparo Pineda Tovar

Mexico

Abstract

Coronary artery disease (CAD) remains the leading cause of death in Mexico and Western world. Symptoms in women are more subtle. Women usually feel general tiredness and lack of energy, in contrast to men having chest pain. This implies that women do not receive a timely and early diagnosis. According to the National Health Information System, 20 of 100 Mexican women die of cardiovascular disease, 68.5% of Mexicans have problems of obesity, overweight, diabetes, high blood pressure, conditions that increase the risk of CAD. SPECT myocardial perfusion scintigraphy (MPS). With EKG stress or pharmacological test is currently appropriate for diagnosis, risk assessment, stratification, myocardial viability, evaluation of left ventricular function. The Objective of this investigation is to show that SPECT MPS is a noninvasive diagnostic test that identify women with increased CAD risk. Cardiac SPECT MPS is a noninvasive diagnostic and prognostic test that identify women with high CAD risk and establish timely and early the therapeutic interventions.

Biography

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

PROGNOSTIC VALUE OF HEART FAILURE IN HEMODIALYSIS-DEPENDENT END-STAGE RENAL DISEASE PATIENTS WITH MYOCARDIAL FIBROSIS QUANTIFICATION BY EXTRACELLULAR VOLUME ON CARDIAC MAGNETIC RESONANCE IMAGING

Name & Country

Hua-yan Xu

China

Abstract

Background: End-stage renal disease (ESRD) patients are at high cardiovascular risk, and myocardial fibrosis (MF) accounts for most of their cardiac events. Since MF can affect the evolution of cardiac disease to heart failure, exploring the prediction and risk stratification of MF for heart failure may facilitate the therapeutic management of ESRD patients. The purpose of this study is to investigate the prognostic value and risk stratification of MF as measured by extracellular volume (ECV) on cardiac magnetic resonance (CMR) for heart failure (HF) in patients with hemodialysis-dependent ESRD.

Methods: Sixty-six hemodialysis ESRD patients and 25 matched healthy volunteers were prospectively enrolled and underwent CMR to quantify multiple parameters of MF by T1 mapping and late gadolinium enhancement (LGE). All ESRD patients were followed up for 11-30 months, and the end-point met the 2016 ESC guidelines for the definition of HF.

Results: Over a median follow-up of 18 months (range 11-30 months), there were 26 (39.39%) guideline-diagnosed HF patients in the entire cohort of ESRD subjects. The native T1 value was elongated, and ECV was enlarged in the HF cohort relative to the non-HF cohort and normal controls (native T1, 1360.10±50.14 ms, 1319.39±55.44 ms and 1276.35±56.56 ms; ECV, 35.42±4.42%, 31.85±3.01% and 26.97±1.87%; all $p < 0.05$). In the cardiac strain analysis, ECV was significantly correlated with global radial strain (GRS) ($r = -0.501$, $p = 0.009$), global circumferential strain (GCS) ($r = 0.553$, $p = 0.005$) and global longitudinal strain (GLS) ($r = 0.507$, $p = 0.008$) in ESRD patients with HF. Cox proportional hazard regression models revealed that ECV (hazard ratio [HR]=1.160, 95% confidence interval: 1.022 to 1.318, $p = 0.022$) was the only independent predictor of HF in ESRD patients. It also had a higher diagnostic accuracy for detecting MF (area under the curve [AUC]=0.936; 95% confidence interval: 0.864 to 0.976) than native T1 and post T1 (all $p \leq 0.002$). Kaplan-Meier analysis revealed that the high-ECV group had a shorter median overall survival time than the low-ECV group (18 months vs. 20 months; log-rank $p = 0.046$) and that ESRD patients with high ECV were more likely to have HF.

Conclusions: Myocardial fibrosis quantification by ECV on CMR T1 mapping was shown to be an independent risk factor of heart failure, providing incremental prognostic value and risk stratification for cardiac events in ESRD patients.

Biography

Huayan Xu is a doctor of radiology department who will finish her doctor's degree in West china hospital of Sichuan university. She focuses her researches on cardiac magnetic resonance imaging (CMR) of cardiac myopathy, cardiac disease of systematic disease like end stage renal disease, SLE, and the association of CMR modalities with heart failure.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

EVALUATION OF [64Cu]PYRUVALDEHYDE-BIS
(N4-METHYLTHIOSEMICARBAZONE) AN ATTRACTIVE RADIOPHARMACEUTICAL
FOR MYOCARDIAL PERFUSION FOR PET

Name & Country

Juan C. Manrique Arias

Mexico

Abstract

Copper (Cu) is an important trace element in humans; Due to its decay characteristics, Cu-64 ($T_{1/2}=12.7h$, β^+ [17.4%], β^- [39%], E.C. [43.6%]) is an attractive radionuclide with applications in both, PET Copper molecular imaging and targeted therapy. This radionuclide has been widely used in the labelling of macro molecules such as peptides, proteins, monoclonal antibodies, and thiosemicarbazone complexes, [64Cu]Cu(II)-pyruvaldehyde-bis (N4-methyl-thiosemicarbazone) ([64Cu]Cu(II)-PTSM), a tracer for myocardial perfusion, Cu-64 is produced via the $64Ni(p,n)64Cu$, nuclear reaction. [64Cu]-PTSM is prepared using in-house made PTSM ligand and [64Cu] chloride. Radiochemical purity of [64Cu]-Cu(II)-PTSM is higher than 98%. Cu(II) bis(thiosemicarbazone) complex as myocardial perfusion agents, labelled with positron emitters of Cu with half-lives suitable for its regional distribution from a satellite Centre.

Biography

Juan C. Manrique-Arias currently holds the position of a Senior Radiochemist at the Radio pharmacy/Cyclotron Laboratory at National University of Mexico and Researcher in National Institute of Cancer. Twelve years of experience in the areas of radiopharmaceutical production, nuclear data measurement, radio-isotope separation science and radiolabeling chemistry. Juan Carlos obtained his PhD, degree in Nuclear Sciences from the University of México in 2016 and his Postdoctoral degree in Nanomedicine his PhD, With Honors.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**RESTRICTIVE HEART REMODELING AFTER COMPLEX THERAPY
OF BREAST CANCER**

Name & Country

Natallia Maroz-Vadalazhskaya

Belarus

Abstract

Breast cancer treatment complications, including cardiotoxicity are most dramatic in spite of the increased number of survivors in last decades. Major findings in those are the worsening of systolic function regarding LVEF calculation and deformational indices. Indeed, same patients demonstrate HF symptoms despite "normal" LVEF, which need to be investigated.

Aim: regular assesment of heart remodeling and function was performed to find a substrate of HF symptoms in patients under complex treatment of breast cancer. Cohort of 40 women (27-58 y.o.) with HER2+ breast cancer was assesed by ECG, Echo, biochemical blood markers every 3 months after initial diagnosis and beginning of treatment. Among them 40 pts had metastatic cancer, 5 - primary breast cancer. Radiotherapy, surgery and chemotherapy were performed from 6 months to 10 years before initiation of trastuzumab treatment. Cardiotoxicity (symptomatic falling of LVEF>10% versus basal data) was revealed in one woman, who was excluded from present study. Nine patients met HF symptoms (NYHA I-II) and were treated with iACE, sartans, ivabradine.

Results: Shortening of long axis and decreasing of volume of both atrial chambers followed by the increasing of sphericity indices of LA and RA in groups . Patients of groups of treatment had negative dynamics of systoile longitudinal deformation of both ventricles (for both $p<0,05$). Decreasing of systolic deformation and restrictive chamber remodeling correlated to exercise intolerance and HF symptoms ($p<0,02$). No patients had decreasing of LVEF (pair t-test, $p>0,05$).

Conclusion: all patients demonstrated decreasing of atrial chamber short axis and volume. Less dramatic remodeling and HF symptoms were found in patients with monotherapy of trastuzumab. Atrial restrictive remodeling was revealed in patients treated subsequently by radiotherapy, anthracyclines and inhibitors of HER2neu+ receptors and followed by the worsening of ventricular systolic deformation and HF progress.

Biography

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**USING SMART ECG T-SHIRT WITH AI BASED ARRHYTHMIA
DETECTION**

Name & Country

Oleksii Vynogradov

USA

Abstract

Our team used smart ECG t-shirt with real customers while workout to understand mass market screening case. We has 1789 records from 96 users. Quantity of records:

- up to 10 seconds length - 97
- 10-60 seconds length - 187
- 60-300 seconds length - 167
- more than 300 seconds length - 224

Customers has no real arrhythmia detection. Algorithm has false positive detection:

- up to 10 seconds length: none
- 10-60 seconds length - 2 Sinus bradycardia,
- 60-300 seconds length 37 Sinus tachycardia and 13 Sinus bradycardia
- more than 300 seconds length 1975 Ventricular tachycardia 1356 Sinus tachycardia 496 Supraventricular ectopy or tachycardia 85 Sinus bradycardia 37 Ventricular trigeminy 15 Asystole 4 Ventricular bigeminy

Biography

I'm a serial entrepreneur and investor with twenty-five years experience. I have created nine companies and have done couple exits so far. My professional background is business and team development, software/hardware engineering, sales, and finance. For last eight years I have been focusing on healthcare area with a company called HeartIn. My company is creating a unique smart Garment with built-in sensors that brings wellness solutions and cardio-diagnostic to the mass market. The product has user-friendly comfortable design.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**EARLY DETECTION OF ANTHRACYCLINE INDUCED
CARDIOTOXICITY IN CHILDHOOD ACUTE LEUKEMIA WITH
CARDIAC MAGNETIC RESONANCE**

Name & Country

Ying-kun Guo

China

Abstract

Background: Clinically, the probability of a doxorubicin-induced congestive heart failure is related to the total dose of administered doxorubicin, and early detection and treatment of cardiotoxicity may improve outcomes. The aim of our study was to early detect the cardiac deformation and dysfunction in children with acute leukemia caused by daunorubicin-induced cardiotoxicity using cardiac magnetic resonance (CMR) feature tracking.

Methods: There were forty-six children with acute leukemia and nineteen health children prospectively enrolled in the study. All patients completed the 32 weeks daunorubicin-chemical therapy and cumulative dose was 175mg/kg and the imaging data were analyzed including the left ventricular ejection fraction (EF), and tissue-tracking parameters including global and regional peak strain(PS) and peak displacement(PD) in radial, circumferential, longitudinal.

Result: After 32-weeks daunorubicin-chemical therapy, the decreased LVEFs was found ($60.21 \pm 5.27\%$ vs. $55.49 \pm 4.65\%$, $P < 0.05$) in children with acute leukemia when compared with the controls, including 14 children (30.4%) with impaired LVEF ($EF < 55\%$), and 32 patients (69.6%) with a preserved LVEF ($EF \geq 55\%$). Of the 24 patients with preserved LVEF, the PS in three directions and longitudinal PD significantly decreased when compared with the controls (all $p < 0.05$). Furthermore, 12 patients were found fist-pass perfusion defection (34.3%). For the correlation analysis, myocardial upslope and Max SI were well correlated with the LV regional radial, circumferential, and global longitudinal myocardial deformation values, regardless of LVEF.

Conclusion: In summary, the daunorubicin-induced cardiotoxicity of acute leukemia children can be early monitored by CMR, and the abnormal myocardial deformation was associated with coronary microvascular dysfunction.

Biography

Ying-Kun G. has completed his PhD at the age of 25 years from Harvard University, USA. He is the professor of Si Chuang University, China. He has over 45 publications that have been cited over 300 times, and his publication H-index is 19.896 and focuses on cardiovascular diseases, including new molecular imaging techniques, nano-molecular probe and MR sequences. He also has been serving as an editorial board member of reputed Journals such as Medical Imaging & Interventional Radiology, International Journal of Clinical Research & Trials (IJCRT) ; Radiology and Imaging, Journal of Circulation, Journal of Radiation Oncology & Research; Journal of Cardiology and Cardiovascular sciences and so on.

International Conference on
**CARDIOLOGY AND
CARDIOVASCULAR MEDICINE**

June 18-19, 2018 | Osaka, Japan

Title

NCI: NUCLEAR CARDIOLOGY: CHALLENGES, PROBLEMS AND SOLUTIONS

Name & Country

AO Osman

Sudan

Abstract

Background: Nuclear Medicine Department, National Cancer Institute, University of Gezira, NCI - is considered as a unique center outside the capital of Sudan (Khartoum), and has advanced diagnostic equipment's to help in diagnosis of malfunction organ, such as thyroid, kidneys function and spreading of cancer cells, heart disease ...etc, Myocardial perfusion scintigraphy (MPI), provides anatomical, physiological, and functional information about the heart muscle and its blood flow. Ventricular ejection fraction and wall motion evaluation are now possible with the introduction of technetium myocardial perfusion radiopharmaceuticals and the use of gated single photon emission tomography (SPECT) techniques.

Methodology: In 2006 SPECT gamma camera has been installed in our center and since that time; there were shy and simple attempts to gain benefits in doing myocardial perfusion scintigraphy of a cardiac patient. However it was failed for the many reasons, (e.g. a lack of knowledge of relevant specialists to the possibility of our section in doing this kind of scan at that time, and the lack of personal training for this type of scan, and the weakness of good relations and coordination among the relevant centers). In 2012, the serious attempts to cardiac imaging began, whereas, they made sure of the existence and a viability of all components and liability such as: gamma camera, ECG, treadmill, infusion pump, and software program of cardiac and so on. Then all these components and gamma camera program were tested and checked by scanning of a volunteer in a rest study, and his images was reviewing and processed and approved in all levels, and also displayed in the final shape for reporting.

There have been several contacts and consultations with Wad Medani heart center for the possibility of helping doing myocardial perfusion imaging for their patients. It was agreed to transfer the patients whom were involved in imaging to our department for the preparation of patients and making necessary arrangements before nuclear imaging. Also it was agreed that a cardiologist is to be attended or alternate to oversee the exercise study.

Results: These efforts resulted in imaging four patients till now. Two of them were in of resting studies and two in of exercise studies at first and then at rest in one day protocol,

Conclusion: Still there are some obstacles need to be solved:

No NM specialist resident in our department, only one cardiologist collaborates with our department. Most of the relevant specialists do not know the possibility of the work of this diagnosis in the department. All this resulted in lack of the number of patients who were attended to the center for Cardiac imaging. Also the difficulties of obtaining pharmacological stress agents like Persantine injection which was not authorized in Sudan.

We recommend ; distributing more media release to relevant specialists and centers. Also to train and to employ more NM specialists collaborated with more cardiologist, and work on the provision and maintenance of gamma camera.

Biography

International Conference on CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

STUDY ON THE DOSE EVALUATION VARIATION OF LEFT VENTRICULAR MYOCARDIAL AND LEFT ANTERIOR DESCENDING INDUCED BY HEARTBEAT IN LEFT BREAST CARCINOMA RADIOTHERAPY

Name & Country

Qian Li

China

Abstract

Purpose To study the dose evaluation variation of left ventricular myocardial (mLV) and left anterior descending (LAD) induced by heartbeat in intensity modulated radiotherapy (IMRT) of left breast carcinoma.

Methods: 15 female patients were enrolled. All the patients received electrocardiography gated 4D-CT scan in inspiration breath hold, and CT images were sorted into 20 phases (0%, 5%.....90%, 95%) according to cardiac cycle. Then, the mLV and LAD were delineated slice by slice, and the left breast carcinoma IMRT plans were designed on 0% phase CT images. The volume and dice similarity coefficient (DSC) of mLV were calculated, and the V10, V20, V30, V40 and Dmean of LAD and mLV were compared among different phases.

Results: (1) The average rate of DSC variation of mLV was eightfold of volume, which reached to 472.07% with statistically significant difference ($P < 0.001$). (2) The average rate of variation of mLV Dmean was $(18.74 \pm 9.32)\%$, up to 41.95%, and the difference was statistically significant ($P < 0.001$); the variation range of V10, V20, V30 and V40 of mLV were $(10.06 \pm 9.21)\%$, $(9.24 \pm 9.63)\%$, $(8.45 \pm 9.66)\%$ and $(6.86 \pm 10.00)\%$, and the difference was statistically significant ($P < 0.05$). (3) The average rate of variation of LAD Dmean was $(58.88 \pm 29.10)\%$, up to 130.14%, and the difference was statistically significant ($P = 0.001$); the variation range of V10, V20, V30 and V40 of LAD were $(28.52 \pm 12.11)\%$, $(29.35 \pm 12.65)\%$, $(28.84 \pm 13.74)\%$ and $(26.35 \pm 15.89)\%$, and the difference was statistically significant ($P < 0.001$).

Conclusion The dose evaluation variation of mLV and LAD which were induced by heart beat should not be ignored. Our study provided a reference for the accurate prediction of cardiac toxicity, and that could benefit to protection of heart and cardiac substructure.

Biography

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

DYSLIPIDEMIA, MICROCIRCULATION DYSFUNCTION AND HEART FAILURE IN PATIENTS WITH END-STAGE RENAL DISEASE UNDERGOING DIALYSIS

Name & Country

Rong Xu

China

Abstract

The end-stage renal disease (ESRD) patients with dialysis showed abundant residual cardiovascular risk remains that suggest some previous mechanisms or risk factors. Our study aimed to quantitative evaluation of myocardial microcirculation dysfunction in patients with ESRD undergoing dialysis, and to investigate the clinical lipid factors associated with perfusion parameters that may lead to microcirculation dysfunction and heart failure. In total, 58 ESRD patients with preserved EF (EF \geq 50%) and 19 healthy subjects underwent rest first-pass perfusion. The LV regional myocardial perfusion parameters were analyzed by a commercial software included upslope, time to maximum signal intensity (TTM) and max signal intensity (Max SI). Continuous variables were compared using one-way analysis of variance (ANOVA). The correlation between clinical risk factors and perfusion parameters were analyzed by univariate and multivariable regression analysis.

For the analysis, the Max SI of basal, mid- and apical segments were reduced in ESRD patients with preserved EF compared with normal controls (all $P < 0.05$). Univariate regression analysis showed Max SI was associated with the diastolic/systolic blood pressure ($R=0.26$, $R=0.29$), trioxypurine ($R=-0.32$), creatinine ($R=-0.25$), cholesterol ($R=0.26$), HDL ($R=0.37$, all $P<0.05$); no association was found between Max SI and triglyceride, LDL. Furthermore, for the multivariable regression analysis, the Max SI of three segments showed significant independent association with HDL (basal, $R=0.37$, $P=0.000$; mid-, $R=0.43$, $P=0.000$; apical, $R=0.41$, $P=0.001$). For the follow-up, 19 patients presented with heart failure (32.7%).

In summary, the first-pass perfusion CMR parameters can early detect the regional myocardial microcirculation dysfunction in ESRD patients undergoing dialysis. The HDL could be a vital factor for the progression of perfusion dysfunction.

Biography

Rong Xu. is now a master's degree candidate, majoring in Imaging and Nuclear Medicine at West China School of Medicine of Sichuan University. She has research on cardiovascular imaging, and participated in some society meetings including RSNA, ECR, AOSPR.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

CARDIAC MAGNETIC RESONANCE TISSUE TRACKING DETECTS SUBCLINICAL LEFT VENTRICULAR DEFORMATION IN PATIENTS WITH END-STAGE RENAL DISEASE

Name & Country

Ying-kun Guo

China

Abstract

Background: Cardiovascular damaging is the leading cause of death in patients with end-stage renal disease (ESRD). The aim of this study is to early investigate the subclinical LV deformation in ESRD patients by CMR tissue tracking.

Methods: Forty-seven ESRD patients and 30 controls were prospectively enrolled, including 29 ESRD with persevered EF ($EF \geq 50\%$) and 28 with impaired EF ($EF < 50\%$). The LV myocardial strain parameters including longitudinal (l), radial(r) and circumferential(c) peak strain (PS), peak strain rate (PSR), peak strain velocity (PSV) and peak displacement (PD) were analyzed.

Results: For the results, radial and circumferential strain parameters including peak strain (PS), peak systolic strain rate (PSSR) and peak diastolic strain rate (PSDR) were all decreased in all ESRD with or without preserved EF when compared with controls (all $p < 0.05$). However, longitudinal peak diastolic and systolic strain rate of ESRD with preserved EF was smaller than normal individuals ($p = 0.000$). In contrast to controls, the strain results of basal, middle and apical segments levels shown that PSr, PSc, PSSRr and PSSRc were all reduced in both ESRD; furthermore, these values of ESRD with impaired EF were lower than those of ESRD with normal LVEF.

Conclusion: CMR tissue tracking based LV myocardial dyssynchrony analyzing might provide useful information for the risk stratification and clinical management for ESRD patients.

Biography

Ying-Kun G. has completed his PhD at the age of 25 years from Harvard University, USA. He is the professor of Si Chuang University, China. He has over 45 publications that have been cited over 300 times, and his publication H-index is 19.896 and focuses on cardiovascular diseases, including new molecular imaging techniques, nano-molecular probe and MR sequences. He also has been serving as an editorial board member of reputed Journals such as Medical Imaging & Interventional Radiology, International Journal of Clinical Research & Trials (IJCRT); Radiology and Imaging, Journal of Circulation, Journal of Radiation Oncology & Research; Journal of Cardiology and Cardiovascular sciences and so on.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**THE CAUSE OF CANCER FROM THE POINT OF VIEW OF THE NEW
THEORY OF CVD**

Name & Country

Vladimir Ermoshkin

Russia

Abstract

This report discusses new data on the mechanism of cancer. In fact, these materials form the basis of the old cancer theory proclaimed by the German scientist Otto Warburg about 100 years ago. In 1931, the theory that cancer occurs as a result of an energy metabolism disorder won the Nobel prize for Germany scientist. Back in 1924, Warburg found out that healthy cells generate energy due to the oxidative decomposition of organic acids in mitochondria, and tumor and cancer cells, on the contrary, receive energy through the non-oxidative decomposition of glucose. The transition to an oxygen-free energy method, according to Warburg, leads to the Autonomous uncontrolled existence of the cell: it begins to behave as an independent organism, striving for reproduction. On the basis of this discovery, scientists have suggested that cancer can be regarded as a mitochondrial disease. However, a clear and detailed biochemical justification of the theory for about 80 years was absent. Therefore, for many years, not all researchers have followed this theory, there were other opinions on the mechanism and etiology of cancer. And in 2008, staff members from Boston College and Washington University School of Medicine, USA, has received new evidence to support the theory of Otto Warburg on the origin of cancer [1-6]. So, biochemical justification appeared, but still, the official medicine in the last 10 years did not consider this theory clear and complete. The problem proved more complex. Oncologists, still, were not guided by this theory as the main and only.

Results: In 2011-2018 years a group of physicists from Russia made the assumption [7-25], what is the cause and mechanism of many CVD and cancer. (We emphasize that the congenital pathologies of the cardiovascular system are not considered in this article). In diseases, arteriovenous anastomoses (AVA) actively participate. AVA should exist and open due to stress, prolonged anxiety, increase in arterial pressure. Open AVA can lead to slow or even stop the capillary circulation in some groups of cells of various organs. With hypodynamia, these slowing blood circulation can be long. The cause of the locks lies at the macro level. Observed changes at the micro level (disruption of energy metabolism, increased acidity, biochemical micro processes, hormonal regulation) are primarily a pathological consequence of macro-effects on the body, such as the impact of gravity and atmospheric pressure on the whole body, including the cardiovascular system.

Conclusions:

- 1) The new Theory of CVD and cancer, starting from 2011, continues to develop productively.
- 2) Thanks to the New Theory of CVD and Cancer, the old 1931 theory of the Nobel laureate Otto Warburg about the causes of the appearance of cancer cells now looks logical and practically complete. Dr. Otto Warburg, 100 years ago, made only the first step in understanding the mechanism of cancer.
- 3) Open AVA-anastomoses sometimes closed with greater delays than necessary, or pathologically gap. The damaging effects of increased venous pressure lead to fluid stagnation in the lower half of the body, cardiac arrhythmia, many other cardiovascular diseases and cancer.
- 4) Apparently, cancerous tumors grow only because there comes a time when immune cells can not reach the cancers due to the violation of the traffic of immune cells, due to "plugs" in the vascular system due to open AVA.
- 5) What to do right now? My opinion. It is necessary to create more sensitive medical equipment to search for AVA are pathologically open in the human body, it is possible to replace them with artificial, more sensitive with electronics. Because the valves myocardium the doctors replaced with artificial, and pathological anastomoses AVA yet overlooked. To develop an instrument for the suppression of mechanical impulses, running through the hollow veins and leading to premature excitation of the myocardium.
- 6) Prevention from CVD and cancer should include: daily physical activity, proper nutrition, breathing exercises, exciting work and a happy life.
- 7) Some experiments are needed to confirm the universality of the New Theory.

Biography

International Conference on
**CARDIOLOGY AND
CARDIOVASCULAR MEDICINE**

June 18-19, 2018 | Osaka, Japan

Title

EARLY QUANTITATIVE ASSESSMENT MYOCARDIAL DEFORMATION OF ISOLATED LEFT VENTRICULAR NONCOMPACTION IN PATIENTS WITH NORMAL EJECTION FRACTION USING CARDIAC MAGNETIC RESONANCE FEATURE TRACKING

Name & Country

Rong Xu

China

Abstract

Background: Left ventricular non-compaction (LVNC) is a rare congenital cardiomyopathy, with or without LV dysfunction, and it may be asymptomatic or it may lead to severe HF, sudden death. So, the aim of our study is to early evaluate the myocardial deformation in isolated LVNC children with normal left ventricular ejection fraction (EF) by using cardiac magnetic resonance (CMR) imaging, and compared with adults LVNC patients with LV dysfunction for exploring the correlation factors.

Methods: we investigated 9 isolated LVNC children and 10 adults with normal LVEF ($EF \geq 55\%$), and 19 age- and gender-matched controls. All patients underwent the CMR examination for investigating the morphologic, functional and deformation parameters including peak strain (PS), peak displacement (PD) and strain rate in radial, circumferential, and longitudinal directions.

Results: In all patients, 14 patients were global left ventricular noncompaction (73.7%), two patients were left ventricular septum (10.5%), one patient were left ventricular apical (5.3%), and two patients were right ventricular noncompaction (10.5%). The EF in adult patients were lower than the controls ($p < 0.01$). The PS and PD in three directions decreased significantly in the 10 adults patients compared with the adults controls (all $p < 0.001$), and similar results were observed in the children patients with normal EF. Furthermore, the PS in three directions were associated with the EF ($r = 0.43$; $r = -0.41$; $r = -0.54$); and PS in three directions were also significant correlates with age ($r = -0.47$; $r = 0.46$; and $r = 0.47$).

Conclusion: CMR feature tracking can be used for the detection of early myocardial deformation in the isolated LVNC children who are subclinical left ventricular dysfunctions.

Biography

Rong Xu. is now a master's degree candidate, majoring in Imaging and Nuclear Medicine at West China School of Medicine of Sichuan University. She has research on cardiovascular imaging, and participated some society meeting including RSNA, ECR, AOSPR.

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

PREVALENCE OF CORONARY ARTERY DISEASE DETECTED BY MYOCARDIAL PERFUSION SCINTIGRAPHY IN PATIENTS OF ESSENTIAL HYPERTENSION WITH OR WITHOUT DIABETES MELLITUS

Name & Country

Owais Qadeer Gill

Pakistan

Abstract

PURPOSE: Aim of this retrospective study was to find prevalence of coronary artery disease (CAD) in hypertensive patients with or without diabetes mellitus.

MATERIALS AND METHODS: Data of patients having essential hypertension (n=931) referred to PINUM for myocardial perfusion scintigraphy (MPS) was analyzed. This data was divided into two groups: HDM group contains data of patients having hypertension with diabetes mellitus (n=456, 48.9% of total, M:F=245:211). While data of patients having hypertension without diabetes mellitus was placed in H group (n=475, 51.0% of total, M:F=254:221). Mean age was 52.4 + 10.2years in HDM group and 48.7 + 10.9years in H group. Duration of hypertension was 5.2 + 5.0years in HDM group and 5.6 + 5.5years in H group. Duration of diabetes mellitus was 7.0 + 5.8years in HDM group. Each group was divided into subgroups based on gender, clinical presentation and age. Patients with perfusion defects on MPS were considered to have CAD.

RESULTS: Prevalence of CAD is higher in HDM group than H group subjects (47.8% vs. 30.1%; p<0.001). Prevalence of CAD is higher in males than females in HDM (53.9 % vs. 40.8%) and H groups (39.4% vs. 19.5%) respectively. The difference of prevalence of CAD in HDM and H groups is more marked in females (40.8% vs. 19.5%; p<0.001) than males (53.9 % vs. 39.4%; p=0.001). Prevalence of CAD in patients with typical presentation is not statistically significant in HDM and H groups (72.3% vs. 68.4%; p=0.645), while in subjects with atypical presentation, prevalence is significantly higher in HDM than H group (40.8% vs. 26.8%; p<0.001).

CONCLUSION: Prevalence of CAD is higher in the HDM group than the H group. Prevalence of CAD is higher in males than females in both groups. Prevalence is almost similar in patients with typical presentation in both groups. While with atypical presentation, prevalence of CAD is significantly higher in HDM group. Prevalence of CAD increases with age in both groups. However in females, this increase in prevalence with age is markedly slower till the age of 65years. After 65, prevalence of CAD in females approaches to that in males.

Biography

International Conference on

CARDIOLOGY AND CARDIOVASCULAR MEDICINE

June 18-19, 2018 | Osaka, Japan

Title

**ANOTHER VIEW ON MECHANISM OF HEART FAILURE AND
CANCER**

Name & Country

Vladimir Ermoshkin

Russia

Abstract

Purpose: Heart failure and some cancers are extremely pressing in the world. The opinions of researchers on the causes of these diseases are very different and sometimes contradict each other. Acutely new medical ideas are needed.

Method: Since 2011, our group study of the problem, the search for information in the literature [1,2], participation in conferences, discussions with leading Russian and European cardiologists.

Results: For modern medicine, the causes of heart failure and cancer are unknown. For example, researchers of the scientific Bakulev-center of cardiovascular surgery believes that heart failure can be the main manifestation of almost all heart diseases [3]. This statement is nonsense for modern healthcare. It is believed that heart failure is incurable. Our team of researchers managed to show that perhaps the majority of people have the same primary mechanism of many cardiovascular diseases [4-7] and cancer. Most people with stress, under heavy loads between large arteries and veins [8] opens arteriovenous anastomoses (AVA). Thanks to the opening anastomoses rapidly reduced blood pressure (jumps of pressure is symptom Ermoshkin Lukyanchenko) and the body saves itself from strokes and heart attacks. But it does not pass "free". When people lead unhealthy lifestyles, with hypodynamia AVAs can remain open for too long. Loss of arterial blood leads to a decrease in blood pressure and an increase in venous pressure. Overflow of hollow veins leads to mechano - induced arrhythmias. In addition, due to increased venous pressure, valves are damaged over time. After this increased venous pressure in the venules. The movement of blood in some capillaries will be blocked. There are stagnation, edema, varicose veins, thrombosis, first in the lower half of the body, then in the upper [9.10]. The lack of oxygen and necrosis increase the acidity of the tissues. Cells of the immune system, moving along with the flow of blood, due to problems with blocking blood circulation can not approach the tumor cells and destroy them. Therefore, over time, the likelihood of cancer cells increases. So first stress and overload, then the rise in blood pressure, then open AVA, then overflow hollow veins and arrhythmia, then the swelling, dirty blood in the lower half of the body, then a CVD and the problems of cerebral circulation, then death due to heart problems or cancer.

Prevention: Training and / or treatment of AVA. The cyclical exercises. Need to get up from the computer every 45 min. Respiratory exercises with the maximum movement of the diaphragm! Exercise (up to 3 times a day), food with a predominance of alkaline food, swimming, sun.

Conclusion: A simple but plausible mechanism of occurrence of many cardiovascular and oncological diseases was found. Old mistakes need to correct. It is necessary to study the functioning of the AVA.

Biography

Vladimir Ermoshkin completed his Graduation in Physics department at Moscow State University in 1978. He has worked at Russian New University (RosNOU) as Physicist. He has published about 20 articles on Cardiology in prominent magazines. Since 2012, Ermoshkin V. have participated in several international medical conferences. Currently, there are more than 15 invitations to foreign medical conferences in 2018.