



CLINICAL CARDIO-DIABETIC SOCIETY OF INDIA

BIHAR-JHARKHAND CHAPTER

CCDSICON - 2020

4th National Conference of
Clinical Cardio – Diabetic society
of India (Bihar & Jharkhand)

2ND August 2020 | 4 : 00 PM Onwards

Newslettter



FROM THE DESK OF FOUNDER PRESIDENT

Dr. A.N. RAI

Clinical CardioDiabetic Society of India (CCDSI) is newly formed society established on 30 November 2016. It's aim is to update clinicians on newer developments in diagnosis and managements in fields of Cardiology, Diabetes, Hypertension and Nephrology by holding regular CMEs, Screening Camps, Annual conferences.

The idea to form CCDSI came when we had CME of CardioDiabetic forum, at Port Blair, Andman Nicobar in September 2016. In view of Increasing numbers of CardioDiabetic patients we formed CardioDiabetic Forum at Gaya in 2002.

Bihar was first to have State Chapter of CCDSI. Bihar Chapter had its 1st State conference at Bodhgaya in May 2017, 2nd at Bhagalpur 2018 3rd at Purnea 2019. At 2nd conference at Bhagalpur it was decided to have joint Chapter of Bihar and Jharkhand (B&JCCDSI)

Due to pandemic of Covid19, it has been decided to hold 4th conference (B&JCCDSICON 20) as virtual conference through webinar on 2nd August . CCDSI had its 1st National Conference at Sundar Ban in September 2017, 2nd at Mount Abu in October 2018, 3rd at Chennai in September 2019. 4th National conference was Schedule from 9 to 11 October 2020 at Bhuneshwar but due to Covid19 pandemic It has been now decided to have virtual conference on 10th & 11th October.

Dr R Rajasekar, President CCDSI has regularly arranged webinar twice a month since March . Dr Ajay Kumar President B&JCCDSI has also arranged regular webinar. CCDSI has its wave site It publishes monthly Newsletter. Dr Ajay Kumar Sinha is its editor.

Its 1st Newsletter of September 19 which published 10 commandment of important diseases was Very much appreciated and worth reading. CCDSI has its 1st Midterm International Conference at Bangkok in May 19 , 2nd was scheduled in July 2020 at Singapore but due to Covid19 pandemic it has been rescheduled in March 2021.

My Vision

As per WHO prediction CardioDiabetic and other metabolic Diseases are going to affect more than 2/3 of the population of India by 2025. Therefore CardioDiabetic Society is need of of the hours and will have great relevance in future.

Dr A. N. Rai



Pro. (Dr.) D. P. Singh

MD FICP FACP FIAMS FCSI FICS
FIACM FRCP

Glasgow FRCP Edinburgh
Professor of Respiratory
Medicine J L NMCH Bhagalpur
Governing body member of
National API , President-elect CSI
Bihar

Vision on research:

The Cardiovascular diseases are the leading cause of death in the world ,while 80% of CV deaths occur in low-middle income group countries like India. Atherosclerotic CV disease is the cause of premature death in Type2 Diabetes. Atherosclerosis is the culprit pathogenesis which is enhanced by risk factors some are modifiable and some are non-modifiable. Our research focus is how to reduce or minimise the modifiable risk factors so that premature deaths can be preveted. Substantial cv deaths are to physical inactivity, unhealthy diet, tobacco smoking/ cosumption, alcohol consumption and reduction in numbers in Hypertension, Diabetes and Dyslipidaemia. Our first focus would be doctors who provide health care of people and it is expected that they take adequate care of themselves. However, doctors have 49.2% risk of CVD as compared to general population who has 31.2% risk. We are conducting a cardiovascular health survey among the doctors of Bihar and Jharkhand to know their modifiable risk factors and advise to follow preventive cv health guidelines.



MY JOURNEY

Dr. Ajay K Sinha

President

It was really a great feeling and an encouraging beginning while taking over as President of CCDSI Bihar & Jharkhand at Purnea conference. What an academic meeting by Dr. Ram, Dr. Modi and others. It was indeed an unexpected gift to me from Dr. A. N. Rai and CCDSI as I was not the most deserving one to take the august responsibility. Nevertheless, I was very confident to take over the assignment and to live upto the expectations of all concerned by virtue of my inherent strength of doing any job with utmost sincerity and honesty.

Naturally, I promised to take the flag high and I did my best. Website and Newsletter were the new projects. Both were successfully accomplished. My colleagues from India, UK and USA were very supportive and always encouraged me. Program for Nurses and Paramedics was a great success at Paras HMRI. ECG and Arrhythmia program at Patna conducted by Dr S. K. Dwiwedi and Dr. Aditya Kapoor from Lucknow was widely appreciated and rated as one of the best programs in this field. Ten Commandments issue of our Newsletter (Third) was unique. Ten Commandments in Ventricular premature beats by Dr. Mithilesh Das from Indianapolis; USA was the best on this topic ever.

Finally, the four-year-old child, CCDSI started running well. Simplicity and commitment of Dr. A. N. Rai, Dr. Rajasekaran and all others, hard work of Hemu Da, Dr. Ram, Dr. D. P. Singh, Dr. B. P. Singh and many known and unknown friends brought laurels to CCDSI. Dr. Raj Kamal and Dr. D. P. Khaitan too were responsible for laudable achievements. Dr. Khaitan's book on ECG was indeed a landmark.

Can we imagine this program without National speakers like Dr. Pramod Kumar from Delhi who is master of radial intervention, stalwarts in Diabetes like Dr. Awadhesh Singh from Kolkata and Dr Virmani from Jamshepur and researcher par excellence Dr N.K. Singh? They are in fact the backbone of today's program. How can I forget Dr. Rajay Narain from the UK and Dr. Mintu Turakhia from Stanford who contributed immensely and are on our platform today?

And finally, I must thank Dr. R. K. Agrawal, Dr. S.S. Chatterjee, and Dr. U. C. Samal for their valuable guidance. My departmental colleague and Secretary, CCDSI, Bihar & Jharkhand, Dr Nishant Tripathy has been the non-failing stamina and strength for me. Undeniably, faculties from Cardiology and Medicine has become our esteemed members and their contribution to CCDSI will always be remembered.



Milan K. Sinha

Stress Management, Lifestyle Management & Wellness Consultant Guest Columnist, Awareness Campaigner & Motivational Speaker

"Overall health and medical care of all citizens are the real challenges, equally before the government and society. In today's LPG (Liberalisation, Privatisation, Globalisation) scenario, when life has become fast, lifestyle aberrations are serious and golden Indian values and practices of staying healthy and happy have taken a back seat, the number of persons suffering from Hypertension, CVD (Cardiovascular Disease) and Diabetes has gone up significantly and continuously on rapid rise. In fact, these diseases account for more deaths in India and in many other countries compared to all other diseases put together. This is really a serious cause of concern. Consequently, it is highly desirable to accelerate our initiatives both on preventive as well as on curative front simultaneously. We all know that 'Awareness is half the solution' and 'Prevention is better than cure' but "Ensuring timely and cost effective medical facilities" is of paramount importance.

Undoubtedly, CCDSI has been engaged in path breaking and innovative activities in this direction.

Methobact Methobact 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Methobact Inj. Methobact 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Lycface Syp. Lycface Syp 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Citolip Citolip 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab
Rabmack Rabmack 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Rabmack D Rabmack D 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Levojat Levojat 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Lipornic OZ Lipornic OZ 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab
Lipoxime Lipoxime 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Calcilip Calcilip 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Lipnac - P Tab Lipnac - P Tab 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Lipnac - SP Tab Lipnac - SP Tab 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab
Amoxlip 625 Amoxlip 625 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Moxlip Eye Drop Moxlip Eye Drop 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Carbrip Eye Drop Carbrip Eye Drop 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Rosulow 5 Rosulow 5 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab
Rosulow 10 Rosulow 10 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Rosulow 20 Rosulow 20 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Rosulow Gold Rosulow Gold 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Telflow 40 Telflow 40 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab
Telflow 80 Telflow 80 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	MTXL 25 MTXL 25 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	MTXL 50 MTXL 50 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab	Glyco - G1/G2 Glyco - G1/G2 100mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab Fenitoin 100 mg - 100 mg Tab

State Code - 10-Bihar
E-mail : lipuroffice@gmail.com
Phone : 7544065735

LIPUR PHARMACEUTICALS PVT. LTD.
2nd Floor Rama Sadan, Near Anand Steel Udyog
Bihar Sahar, Patna - 20



Vision and Relevance of CCDSI IN FUTURE

Dr. R .Rajasekar

The Epidemiology is vital as it decides the study of distribution and determinants of health related states or events in specific population and apply the study to have a control of population. The CVD and DM are like Tom and Jerry, a deadly duet.

- The CVD are ischemic heart diseases, Stroke, Disease of Aorta and arteries ie HYPERTENSION and Peripheral Vascular Disease. The other CVDs are Congenital Heart Disease, Rheumatic Heart Disease, Cardiomyopathy and Cardiac arrhythmias. By assessing Cardiovascular risk scores one can draw conclusion to prevent the risk.
- The CV risk scores are Framingham risk score, SCORE (Systemic Coronary Risk Calculation), ASSIGN (Assessing cardiovascular risk using SIGN guidelines), QRISK-1,2, and 3, WHO/ISH risk score, JBS-3 (Joint British Societies for Prevention of CVD), and Inter Heart modifiable risk score.
- In India the CVD is vital, reason being there is high absolute numbers, Socio economic status, disproportionate income versus expenses and life long burden in elders. CVD is a leading cause of death in India about 25.27%. The primary care physicians are to be familiar with Epidemiology. They have to understand the magnitude of problem and to prevent CVD, to understand the clinical trials properly to avoid misinterpretation. They have to comprehend patients questions, educate, establish compliance with them. We must try to have absolute risk reduction. The number needed to treat is (NNT) is the average number of patients who need to be treated to prevent one bad additional outcome.
- The Forest Plot is a graphical display of assessment of results from a number of scientific studies addressing the same query along with net results. So the core principle of preventing CVD is principles of continuous , Population based, Multiplicative, and Absolute risks.
- The novel risk factors for CVD, are Lipoprotein (a), hsCRP, inflammatory markers (Cytokines), Genetic Polymorphism, Low birth weight/ Size (Barker Hypothesis), & Homocysteine. The determinants of Atherosclerotic CVD are modifiable and non modifiable . Modifiable risk factors are Behavioral ie Tobacco, alcohol, Diet (low fruits and vegetables intake), Sedentary lifestyle, Disorders of Sleep and Stress, the Environmental-Air pollution, Biological-High BP, DM, Dyslipidemia & Metabolic Syndrome (Central Obesity). The non modifiable risk factors are Family History, Age, Gender and Ethnicity
- WHO Atlas shows hike of average BP ie SBP in urban population aged 40-49 years. The awareness, treatment and control of HYPERTENSION is low in rural population of India. A association of Diabetes and CVD -- It is about two thirds of deaths in Diabetics attributed to CVD-->IHD-->other heart disease-->Stroke. Diabetes leads to a risk equivalent to ageing 15 years more than smoking. About one third of patients presenting as myocardial infarction have undiagnosed DM. Patients of MI with DM have worse hospital in patient outcomes. The combined mortality of Diabetes and MI is there is reduced life expectancy of 12 years. In patients with Diabetes, there is 65% of death resulting from heart disease- /stroke. Diabetes is a global emergency. There is rising prevalence in both urban and rural India.
- Diabetes attributes life time risk for CHD. Thus Clinical Cardiometabolic Society of India can screen, diagnose, prevent and treat Indian Citizens. CCCDSI can impart knowledge by CMEs to upcoming doctors for updates.

Cardiovascular diseases (CVDs)

Cardiovascular diseases (CVDs) are the leading cause of mortality and morbidity across the globe. India is no exception to that. Approximately 25% of all mortality is attributable to CVD. Ischemic heart disease and stroke are the predominant causes and are responsible for >80% of CVD deaths. The Global Burden of Disease study estimate of age-standardized CVD death rate of 272 per 100 000 population in India which is higher than the global average of 235 per 100 000 population.

The CVD epidemic in India has some characteristics such as its accelerated course, the early age of disease onset in the population, and the high case fatality rate. In India, the epidemiological transition from predominantly communicable disease to noncommunicable diseases has occurred over a rather brief period of time. Premature mortality in terms of years of life lost because of CVD in India increased by 59%, from 23.2 million (1990) to 37 million (2010). Despite wide heterogeneity in the prevalence of cardiovascular risk factors across different regions, CVD has emerged as the leading cause of death in all parts of India, including poorer states and rural areas. The progression of the epidemic is characterized by the reversal of socioeconomic gradients; tobacco use and low fruit and vegetable intake have become more prevalent among those from lower socioeconomic backgrounds. In addition, individuals from lower socioeconomic backgrounds frequently do not receive optimal therapy, leading to poorer outcomes. Countering the epidemic requires the development of strategies such as the formulation and effective implementation of evidence-based policy, reinforcement of health systems, and emphasis on prevention, early detection, and treatment with the use of both conventional and innovative techniques. Several ongoing community-based studies are testing these strategies.

CVD is a major public health problem in India, often impacting the most productive years of an individual's life. The epidemiological transition plays out differently in different regions of India because of varied economic development. However, tobacco use and hypertension in urban settings are consistently associated with lower levels of education and income. As the country progresses along the direction of epidemiological transition, other risk factors of CVD may in the future show similar social gradients. Taking control of the CVD epidemic in India needs all the stakeholders, including the policy makers, to acknowledge and address the social determinants that are strongly linked to CVD risk factors and to the related morbidity and mortality. The rising CVD burden and the damaging consequences it has on individuals, families, and populations require urgent attention. Innovative strategies are needed to halt the progression of the CVD epidemic in resource

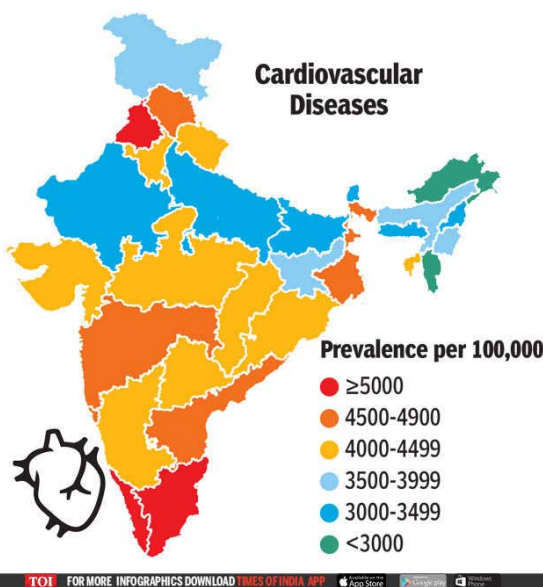
poor settings in India. To address the socioeconomic differentials in the burden of disease and healthcare needs of Indians, more resources need to be directed toward applying the existing knowledge base to tackle the CVD epidemic in policy, programs, capacity building, and research arenas. Hypertensive heart disease, among other CVDs, is a significant problem in India, with 261 694 deaths in 2013; this is an increase of 138% in comparison with the number of deaths in 1990. Rheumatic heart disease also continues to be a problem in several parts of India, with an estimated 88 674 deaths (7 per 100 000 population) in the year 2010. Reliable national-level data on the rheumatic heart disease burden are not available from India because of the differences in definitions used in existing studies. However, the available estimates suggest that rheumatic heart disease prevalence is in the range of 1.5 to 2 per 1000 individuals (2–2.5 million cases in absolute numbers).

Unlike Western populations, atrial fibrillation appears to be less common in India, with rheumatic heart disease contributing to nearly one-third (31.5%) of the atrial fibrillation burden. These data are based on the Randomized Evaluation of Long Term Anticoagulant Therapy (RE-LY) registry, a registry of 15 400 patients from 46 countries, including 2500 patients from India, presenting to emergency departments. To the best of our knowledge there are no nationwide estimates on the prevalence and incidence of atrial fibrillation, heart failure, and cardiomyopathies in India.

Based on Global Burden of Disease study estimates, the contribution of atrial fibrillation and flutter to the overall CVD burden in India appears to be small. Furthermore, the proportional mortality and morbidity burden attributable to other types of CVD such as aortic aneurysms, peripheral vascular disease, and endocarditis are also relatively small.

Need of data collection and review should be essential part of medical education, research and auditing. Then only we will progress and have our own consensus and guidelines. Data are just like torch which will show us path of basic clinical research

Dr. Ajay K Sinha
M.D. (PGI Chandigarh), PhD,
FACC, FESC, FCSI, FICC, FAPSCC
Consultant Cardiologist,
Ex-Director, Paras-HMRI, Patna, India
Ex-Associate Editor, Indian Heart Journal
President, Clinical Cardio Diabetic Society of India,
Bihar and Jharkhand
Convener, Preventive Cardiology Council, CSI



TOI FOR MORE INFOGRAPHICS DOWNLOAD TIMES OF INDIA APP

App Store Google Play



EPIDEMIOLOGY IN INDIA

**DR.R.RAJASEKAR, KUMBAKONAM
TAMIL NADU**

Until recently, we all know in India more diabetics than any other country in the world, according to the International Diabetes Foundation, (IDF) India overshadows China in topping the list. As on today Diabetes affects more than 62 million Indians, which is more than 7.2% of the adult population. The average age of onset is about 42.5 years. Almost 1 million Indians die due to diabetes every year. The Indian Heart Association of India says by 2035, there will be 109 million individuals with diabetes. American Diabetes Association concurrently states that India will have a greater rise of Diabetes by 2030.

India seems to be the world's capital of diabetes. Thus the statistics alarms us as, it is going to be 69.9 millions and 80 millions by 2025 and 2030 respectively. This vividly indicates that the developing country will touch the magnitude of 266%.The net result they develop complications of Diabetes and it is very much bothersome. The reason for this higher prevalence is due to high incidence the dual cause of Genetic Preponderance, taking a high-calorie diet and sedentary lifestyle in growing middle class people of India.

We all as citizens of India will identify Diabetes by simple screening test of Indian Diabetes Risk Score (IDRS) and diagnose at its root, then advise Life Style modifications, initiate early therapy to reduce the burden of Diabetes and complications. We have to motivate the following advice to reduce the burden of Epidemiology of Diabetes in India by joining our hands together.

As Five healthy habits may decrease risk of cardiac disease and cancer, thereby prolonging life span by more than 10 years according to a recent Study in USA. These healthy habits also will reduce the hardship of Diabetes.

My Mnemonics.

- Eating healthy,
- Exercising regularly,
- Expend excess weight to maintain a healthy body weight
- Eschew Smoking
- Evade excess alcohol consumption.



**DR. HEM SHANKER SHARMA,
MD, FICP, MACP
ASSOCIATE PROFESOR OF
MEDICINE, JLNMC BHAGALPUR**

HYPERTENSION:AN UNWANTED UNISON WITH THE ARTERIAL TREE

Married to the arteries of uncountable number of Individuals, hypertension seldom fail to engross the medical sorority by its ever intensifying rubble, bewildering the integrity of the cardiovascular system. Being the machinery behind 13% of the global deaths, it has already engulfed the developing countries which are yet to sanitize themselves from the affection of infectious diseases. The global burden of hypertension is escalating, pertaining to the pandemic obesity and aging population, and is projected to affect 1.5 billion persons which turns out to be 1/3rd of world's population. Hypertension itself has set afire the various benches of judiciary accountable for lining up the protocol for diagnosing and treating the disease in such a way that each has generated a visibly different set of guidelines creating a sense of commotion amongst the followers.

India handles a heavy burden of hypertension in its shoulder. The global burden of diseases data accounted 1.63 million deaths in India due to hypertension in 2016 alone. It also earmarked that over half of the deaths due to the ischemic heart disease, stroke and chronic kidney disease were also related to high systolic blood pressure. A cross-sectional, population-based study on a large nationally representative model of 1.3 million individuals carried out between 2012 and 2014 revealed that the crude pervasiveness of hypertension in India was 25.3 per cent.

The sense of anosognosia for the presence of hypertension amongst the individuals further complicates the problem . A systematic review and meta-analysis of 142 studies on prevalence, knowledge and control of hypertension in India published between 1950 and 2013 showed that only a quarter of rural and just above 40 per cent of urban Indians were conscious of their hypertension status. The WHO acknowledged this problem and made the ornamental theme of 'Know your numbers' and reiterated the need to focus on the importance of screening for early detection and treatment of hypertension.



COVID, LUNG AND HAPPY HYPOXIA

DR. MRITUNJAY KUMAR SINGH

CONSULTANT PHYSICIAN AND NEPHROLOGIS
CHANDRANEEL CLINIC AND AIMS GAYA
SECRETARY, API BIHAR CHAPTER
SECRETARY, NATIONAL CCDSI
SCIENTIFIC CHAIRMAN, CCDSI BIHAR CHAPTER

Lung is the most common target organ of COVID. The respiratory disease in corona has extremes of presentation (mild common cold like illness to severe respiratory failure). Lung injury of covid includes pneumonia, acute respiratory distress syndrome, pulmonary vessel thrombosis and respiratory bronchiolitis etc.

Chest XRAY is helpful in triage of patients. Bilateral involvement, peripheral and lower lobe involvement increases the probability of COVID.

Happy hypoxia or silent hypoxia is a condition which occurs during early stage of disease due to poor diffusion of oxygen, rapid removal of carbon dioxide and relatively preserved compliance of lung – leads to hypocapnic hypoxia. In this condition patients are less dyspneic despite gross hypoxemia. This condition can be detected at earliest with simple use of pulse oximeter, and can be treated with high flow nasal cannula oxygenation (HFNC), continuous positive airway pressure (CPAP) and prone positioning. So if early detected yield is big with low resources.

COVID AND KIDNEY:

Renal manifestation of covid includes acute tubular necrosis (ATN), acute interstitial nephritis (AIN), thrombotic microangiopathy (TMA), collapsing glomerulonephritis and renal infarction. Management of renal injury includes complement inhibition or removal, anticoagulation, maintenance of euvolemia and renal replacement therapies in form of hemodialysis (HD), continuous renal replacement therapy (CRRT).

COVID AND HEART:

Severe covid infection is associated with Myocarditis, Cardiac arrhythmias, precipitation of acute coronary syndrome and congestive cardiac failure. Drug induced QT prolongation (anti retroviral, hydroxy chloroquine) is also one of the manifestation we should look for. Management of cardiac injury includes rhythm restoration, decongestion, inotropics, anticoagulation therapy, primary angioplasty and frequent ECG monitoring to look for QT prolongation.

COVID AND HYPERTENSION;

Hypertension is the commonest morbidity associated with COVID. Initially there is a controversy regarding the continuation of ACEI/ARBs in covid patients due to high mortality rate in these patients. But there was immediate rebuttal from major CV societies and they stated that there was no data to support the adverse outcomes of ACEI/ARBs in COVID19 patients, so ACEI/ARBs should be continued COVID patients.



Zuventus

*Dedicated to bring Joy and Jubilation
in people's Lives*



In • Essential Hypertension

• Renal Parenchymal Hypertension • Angina

EFNOCAR[®] 20/40

Efonidipine Hydrochloride Ethanolate 20/40 mg Tablets

The *Incomparable CCB* with *Extra Ordinary Care*

In • Essential Hypertension

• Angina • Post MI • CHF

KIMET[®] XL 12.5/25/50

S(-) Metoprolol Succinate Extended Release Tablets

Chirally Pure... More **CARDIOSELECTIVE**

In Atrial Fibrillation • Atrial Flutter

Fibricor[®]

Ibutilide Fumarate 0.1mg/ml Injection

Restores Rhythm... Rejoices Life!

In Treatment of Uncontrolled Type 2 Diabetes Mellitus

Vil-GM[™]

Vildagliptin 50 mg + Metformin 500 mg / 1000 mg Tablets

The **GOLD STANDARD Duo**

In ACS* • Post Coronary Interventions

Revostat[®] GOLD

Rosuvastatin 10/20mg + Clopidogrel 75mg +
Enteric Coated Aspirin 75mg Capsules

Reinforce Compliance... Ensures Control

In ACS & Post MI

Ticabest[™]

Ticagrelor 90 mg Tablets

*Gives LIFE a **RENEWED** Chance*