TAKE HOME MESSAGE
FROM
KEY LECTURES JIC 2019
DAY-1
10 New Emerging Cardiovascular Technologies in 2019 - Case-Based Update
- DR. KEYUR PARIKH

**TAKE HOME MESSAGE**

- Important goal for current and future of CV healthcare
- Cost of therapy, available technology, practice patterns highly dynamic
- Costs associated with unintended harm or complications
- Evaluation of burden of cost based on varied perspectives (individual, third party, stakeholder, societal)
Case-Based Approach of Cryptogenic Stroke: Did you look at Heart?

- DR. SAMIR KAPADIA

**TAKE HOME MESSAGE**

- In selected patients with a PFO and cryptogenic stroke, transcatheter PFO closure is the most effective treatment to reduce the risk of recurrent stroke.

- In those with a PFO and cryptogenic stroke treated with medical therapy, anticoagulants may be slightly superior to antiplatelet therapy.
Case-Based Approach to Interpretation of Thyroid Function Tests

- DR. VIVEK PATEL

**TAKE HOME MESSAGE**

- The Results of thyroid function tests (TFTs) must always be interpreted in light of the clinical status of the patient: hypothyroid, euthyroid or hyperthyroid

- Awareness of the conditions and / or disorder that can be associated with different patterns of TFTs guides further investigation and management

- Confounding Factors that might influence thyroid status (eg intercurrent non-thyroidal illness or medications) should be excluded before embarking on further biochemical, radiological or genetic testing

- Screening for interference in thyroid hormone (T4 and T3) and / or thyrotrophic (TSH) laboratory assays should be considered in any patient with apparently anomalous or discordant TFTs

- Referral to a specialist laboratory and / or endocrine service is required when anomalous or discordant TFTs cannot be readily explained by confounding intercurrent illness, medication or assay interference
A Case of Post-MI VSD: What to do?
- DR. DHIREN SHAH

**TAKE HOME MESSAGE**

- Post-infarction VSR is a rare complication with a grim prognosis with Mortality Of almost 40%.
- Once diagnosed, IABP in all patient, and then other management includes any combination of aggressive medical management, MCS (Optional), surgical repair, transcatheter closure, novel surgical/percutaneous hybrid procedures, and palliative care.
- There remains equipoise regarding Surgical timing of repair.
- A multidisciplinary heart team must collaborate at an experienced center to devise a strategy that is tailored to each patient.
A Case of Pulmonary Embolism: An Approach to Management

- DR. HEMANG BAXI

**TAKE HOME MESSAGE**

- Diagnosis: D-dimer, ECG, Echo, CTPA
- Prognosis: CT/Echo, Trop/BNP
- Thrombolysis:
  - Shock / Hypotension
  - RV Dilatation, Marker positive
- Half dose / Cath Directed Thrombolysis:
  - Increasingly used
  - Less bleeding risk, almost equal efficacy
- All patients need anticoagulation: >/= 3 months
- Warfarin still on
- NOACs are highly promising alternatives
Headache is Migraine, Unless Proved Otherwise

- DR. PRANAV JOSHI

**TAKE HOME MESSAGE**

- > 90% of headache in clinical settings is migraine!
- Exclude secondary: SNOOP
- Classify primary headache: duration/frequency.
- Diagnostic criteria: very useful, not essential.
- “Headache is migraine, unless proved otherwise”
Managing Patients with Hyperkalemia

- DR. RECHAL SHAH

TAKE HOME MESSAGE

• Hyperkalemia can lead to adverse cardiac outcomes and mortality
• Regular screening for early detection is warranted in high risk patients
• Management of hyperkalemia requires a multi-faceted approach that entails acute as well as chronic management- reducing high-potassium foods, adjusting medications that cause hyperkalemia and adding potassium binders.
• Still unclear if being on a RAASi, or normokalemia provides better outcomes in at risk patients.
• The advent of new potassium-lowering medications may result in a change in our therapeutic paradigm, by favouring the chronic use of a binder medication over the discontinuation of RAASi therapy.
Raynaud’s Phenomenon: can be an early symptom of AI Rheumatic Diseases Auto-antibodies and Nail-fold Capillaroscopy at Baseline

Predictive role Isolated Raynaud’s Phenomenon with ANA positive status does not warrant Immuno-modulatory therapy.

Cold Protection and Vasodilators: Mainstay of therapy
A Case of Syncope
- DR. AJAY NAIK

TAKE HOME MESSAGE

• Syncope in a lean, thin, young girl does not necessarily mean a vasovagal / reflex syncope
• History is paramount in syncope evaluation
• Judicious use of medications, devices, innovative therapies are needed to take care of our patients.
A Case of Evaluation and Treatment of Constipation - When Laxatives Don't Work

- DR. BHAVESHTHAKKAR

TAKE HOME MESSAGE

• Not all the constipation patients are same
• Laxatives are not the only treatment
• We need to differentiate between different types of primary constipation
• Anorectal manometry, Colon Transit study and balloon Expulsion tests help to find out fecal evacuation disorder.
A Case of Medical Thoracoscopy - A Window to the Pleural Space
- DR. KALPESH PANCHAL

TAKE HOME MESSAGE

• Any undiagnosed pleural effusion – pleural biopsy is gold standard for diagnosis.
• It is not always true that old age patients with undiagnosed effusion have Malignancy.
• Same for young patients with undiagnosed pleural effusion have Tuberculosis.
• Thoracoscopy is done by both PULMONOLOGISTS and THORACIC SURGEONS with a clear cut line of demarcation.
• Imaging is very important role in deciding Medical Thoracoscopy vs VATS
Role of Biomarkers in Sepsis - Case-Based Discussion

- DR. DEEPIKA JINDAL

**TAKE HOME MESSAGE**

- Resistance to antibiotics is a growing threat to global health and all healthcare providers have an obligation to initiate antibiotic stewardship programs
- PCT levels reflects the severity of bacterial infection and falling levels over time indicate the resolution of infection with antibiotic treatment
- PCT testing combined with clinical assessment can substantially reduce:
  - initiation of antibiotics in low / moderate risk situations
  - duration of antibiotics in severe infections
- PCT-guided antibiotic stewardship is safe and does not increase the risk of death or other adverse outcomes
- Guiding antibiotic therapy with PCT testing is cost-effective
A Case of Treatment of Drug Sensitive Tuberculosis Patients

- DR. AMIT PATEL

**TAKE HOME MESSAGE**

- Burden of TB disease is very high in India.
- Sputum is the most important test to diagnose and monitor the disease.
- To prevent MDR TB, it is very important to treat drug sensitive TB in correct way.
- Duration of treatment recommended is 6 months in pulmonary TB and 6-9 months in extrapulmonary TB.
- All treatment failure, defaulter and relapse cases should be tested for drug resistant TB.
- Steroids are not routinely recommended except TBM and TB pericarditis.
Managing Case of Malaria, Dengue and its Complication in Pregnancy

- DR. SNEHA BAXI

**TAKE HOME MESSAGE**

- Malaria and Dengue are two major cause of Preventable indirect Maternal Mortality in India.
- Pregnant patients because of lowered immunity are at increase risk of developing the severe disease.
- Complicated malaria and severe dengue lead to adverse maternal and perinatal outcome including mortality.
- Also there is increased risk of vertical transmission in both.
- There is no specific antiviral drug for dengue. Treatment is mainly supportive and symptomatic. But proper monitoring & hospitalisation is must.
- Parentral artemisin based chemotherapy should be started without delay in severe malaria.
- WHO’s Intermittent Preventive Therapy in pregnancy is promising to prevent malaria in pregnant.
There is much evidence in favour of the existence of DCM:

- post-mortem and histological studies introduced the concept of DCM
- epidemiological studies demonstrated that diabetes is an independent risk factor for heart failure
- experimental studies explored the pathophysiology and demonstrated an adverse effect of diabetes on the heart in animal models;
- alteration of myocardial content (myocardial fibrosis and steatosis) was demonstrated with noninvasive techniques;
- and finally, noninvasive imaging (especially echocardiography) demonstrated a preclinical form of diabetic heart disease with subtle alterations in LV morphology, remodelling and systolic and diastolic function.
CABG or PCI for Multivessel Disease - PCI is a good option
- DR. SAMIR KAPADIA

TAKE HOME MESSAGE

- Optimal medical therapy is very effective tool for majority of patients.
- PCI saves lives in AMI and USA/NSTEMI.
- PCI prevents spontaneous MI especially in patients with severe functionally severe lesions subtending significant myocardium.
- CABG is better than PCI for patients with anatomically complex coronary disease (high SYNTAX score) especially in diabetics and when IMA is used.
- In patients with low SYNTAX score (<22), benefit of PCI and CABG is equivalent for death and MI.
- Stroke is higher with CABG.
- Patient co-morbidities, LV function, anatomy of lesions and target vessels determine the best revascularization strategy – there is still a critical role for a good doctor with sound judgement! Don’t send all patients to CABG but to a good doctor!
What is New in Critical Care? 5 Messages for Physician

- DR. VIPUL THAKKAR

**TAKE HOME MESSAGE**

- Avoid PPI for SU prophylaxis in non-critical patient without significant risk factors as it may confer HARM
- Sepsis is a medical emergency, where simultaneous resuscitation and management is recommended.
- It may be acceptable to wait for 48 hrs in AKI patient are not meeting criteria for emergency dialysis
- In Acute ischemic stroke - TNK-t PA, mechanical thrombectomy are options in selected cases, treat BP only if \( \geq 220/120 \) in early stage, if no special co-morbid state, not a thrombolysis candidate
- Family support intervention in ICU helps pt’s surrogates to perceive care as patient-centered, but doesn’t reduce long term anxiety and depression scale
Take Home Message

- Patients with severe symptomatic AS should be referred for aortic valve replacement
- LV dysfunction from AS is an important indication for treatment
- Patients with severe AS and no symptoms should be assessed with exercise testing, BNP and close follow up
- Low gradient AS needs expert evaluation with cath, dobutamine echo / CT imaging
Case-Based Approach: All Fevers are not Infectious
- DR. SURABHI MADAN

**TAKE HOME MESSAGE**

- Infections/ connective tissue disorders/ malignancies may very closely mimic each other
- Multidisciplinary approach with good radiological, microbiological and histopathological support is must for diagnosis
Case-Based Approach of Insulin Therapy: Newer Ones and Future Developments
- DR. VIVEK PATEL

TAKE HOME MESSAGE

- Smart Insulins: Well tolerated and effective
- Promises to enhance the health and quality of life of patients with T1DM and of patients with T2DM refractory to oral therapy
- Provide intensive glycemic control without increased risk of hypoglycemia and weight gain
- Continuing progress in the coming years is expected
• Newer and safer drugs are need of the hour
• Available antibiotics should be used judiciously
• Optimise the dosing regimens and use combination therapies where needed
• Not to be used as substitutes of good infection control!
Interesting Case in High Risk Pregnancy - DR. DEVANG PATEL

TAKE HOME MESSAGE

• Major Fetal anomalies can be diagnosed as early as 11 – 14 weeks of Pregnancy
• Fetus is a patient and requires its own specialist for optimal care
TAKE HOME MESSAGE

• Individuals with a known or suspected genetic condition
• Family members of those with a known or suspected genetic condition
• Children with dysmorphic features or learning difficulties, or both
• Individuals with a family history of cancer—for example, breast cancer or bowel cancer
• Couples with a history of recurrent miscarriages
• Couples or families following the death of a child from a known or suspected genetic condition
• Couples for whom an abnormality with potential genetic implications has been detected during one or more pregnancies.
• Please refer them to a genetics doctor- they will be really pleased to meet us.
So, in today’s world of evidence-based medicine, every clinical decision has to be backed up with a concrete evidence, both guideline and investigation based.

Cardiac MRI (CMRI), fits the bill perfectly in view of its numerous clinical applications and obvious advantages over similar contemporize investigations.

CIMS Hospital offers the latest cutting-edge technology in cardiac MRI (CMRI) backed up with perfect mixture of experience and expertise in the field of cardiology and radiology.
CAD is BFF (Best Friend Forever) of COPD!

- DR. BHAVIN DALAL

**TAKE HOME MESSAGE**

**TREATMENT OF IHD IN PATIENTS WITH COPD**

- IHD should be treated according to usual IHD guidelines; there is no evidence that IHD should be treated differently in the presence of COPD.

- Selective beta₁-blockers are considered safe based on relatively few short-term studies.

- The benefits of selective beta₁-blockers when indicated in IHD are considerably larger than the potential risks, even in patients with severe COPD.

**TREATMENT OF COPD PATIENTS WITH IHD**

- COPD should be treated as usual; there is no evidence that COPD should be treated differently in the presence of IHD.

- No studies on COPD medications in patients with unstable angina exist, it seems reasonable to avoid especially high doses of beta-agonists.

GOLD 2011
CAD is BFF (Best Friend Forever) of COPD!

- DR. BHAVIN DALAL

**TAKE HOME MESSAGE**

**TREATMENT OF HF IN PATIENTS WITH COPD**

- HF should be treated according to usual HF guidelines; there is no evidence that HF should be treated differently in the presence of COPD.

- Selective beta2-blockers have a significant impact on survival in HF and are considered safe for HF patients who also have COPD.

- Treatment with bisoprolol in HF with concomitant COPD decreased FEV1 but without deleterious effects on symptoms and quality of life. Hawkins et al Eur J Heart Fail 2009; 11: 684.

**TREATMENT OF COPD IN PATIENTS WITH HF**

- COPD should be treated as usual; there is no direct evidence that COPD should be treated differently in the presence of HF.

- An observational study found an increased risk of death and hospital admission among patients with HF treated with inhaled beta-agonists, indicating a need for close follow-up of patients with severe HF who are on this treatment for COPD. Au et al, Chest 2003 123:1964.

GOLD 2011
Cardiogenic Shock
- DR. PRANAY VAIDYA

**TAKE HOME MESSAGE**

- Reversible stunned and hibernating myocardium represent a major mechanism of myocardial dysfunction in CS.
- Routine use of PACs and IABPs is discouraged based on clinical trials. However, judicious use of PACs and IABPs or pVADs in very sick patients (excluded from the clinical trials) is important to optimal management of CS. New pVADs (Impella) are FDA approved and showing promise.
- Recognizing mechanical causes (VSD, MR, RV Infarction, rupture) is very important to proper CS management.
- Norepinephrine is the vasopressor/inotropic agent of choice in CS.
- Beta blockers (? ACE/ARBs) should be avoided in CS.
- Revascularization (up to 18 hours post shock) is a key therapy in CS. Both PCI and CABG produce survival improvement. PCI performing culprit lesion only first is favored.
- Inflammation occurs in CS, but no benefit demonstrated with anti-inflammatory therapy.
- Most surviving CS patients have good functional (NYHA I and II) class long term.
Case-Based: Statin Intolerance

- DR. ANISH CHANDARANA

**TAKE HOME MESSAGE**

- Inability to tolerate optimum dose of statin
  - Mostly due to Muscle symptoms (CK +/-), Liver enzymes
- Prove it by challenge and re-challenge, using different statin....Prava, Fluva, Rosuva, Pitava
  - Check coexisting conditions, drug interactions
- Take your time...Counsel benefits of statin
  - 90% would tolerate some dose of one or other statin
- If associated with CK elevations + clinical myonecrosis/ myoglobinuria/ARF and no “cause” is found: Not restart
- Reduced dose, + Ezitimibe, PCSK9 Inh: main options
Case-Based: Use of Ivabradine in Heart Failure: In Everyone with Low EF?

– DR. URMIIL SHAH

SHIFT: Efficacy Summary

• HF with systolic dysfunction and elevated heart rate is associated with poor outcomes

• Ivabradine reduced CV mortality or HF hospitalization by 18% ($P < .0001$)
  – Absolute risk reduction: 4.2%

• Benefit was mainly driven by a favorable effect on HF death/hospital admission

• Overall, treatment with ivabradine was safe and well tolerated

Evidence for hypertriglyceridaemia as an independent risk factor for CVD is increasing.

There is increasing evidence that suggest that targeting hypertriglyceridemia may improve atherosclerotic CVD (ASCVD) outcomes.

Currently, in addition to lifestyle changes Fibrates are one of the options for treatment of hypertriglyceridaemia.

Omega 3 Fatty acids in a recent trial have shown favorable result.

In diabetic patients, Saroglitazar is an option.
Psychopharmacology and Cardiovascular Disease

- DR. PARTH GOYAL

TAKE HOME MESSAGE

- Paroxetine, citalopram, escitalopram can be safely given with all statins
  - Possibly Fluvoxetine and Sertraline, as well.
- All SSRIs can be given safely with rosvastatin, pitavastatin, and pravastatin.
- Weak or modest 3A4 inhibitors can be used cautiously with 3A4-dependent statins
- Applies to Fluvoxamine with Atorvastatin, Lovastatin, and Simvastatin.
NOACS: What Physician Should Know?
- DR. AJAY NAIK

TAKE HOME MESSAGE

- Differences between NOACs.
- Indications, Use and Contra-indications
- When to switch from Warfarin to NOACs
- Individualized approach to Pt starting on NOAC
- Renal Function evaluation
- Contraindications and Drug interactions
- Management of bleeding on NOACs
- Annual Lab tests
- Overall cost evaluation of NOACs vs. Warfarin
- Use of CHA2DS2-VASc score for Stroke risk.
• The ACC/AHA Guideline is not entirely sensible and relies excessively on a single trial (Sprint) with many flaws.

• The recommendation to treat most patients to more aggressive targets (130/80 mm Hg) is not evidence based. Both classical studies (ACCORD) and SPRINT show significant harms with lower BP targets including hypotension and renal failure.

• The best approach is reserving more intensive therapy for the highest risk patients and discuss with each patient both benefits and harms, including the burdens of polypharmacy.
Sensor data presented via tablet computer, pocket ultrasound, handheld electrocardiogram (ECG) acquisition, clinical decision support, and automated progress note development- Currently, AI is not a replacement for human intellect. Rather, it has the potential to complement and reinforce it.
DAY-2
TAKE HOME MESSAGE

1. Treadmill-2014
3. Stationary Bike-2016
4. Recumbent Air Bike-2018 (Mrs RP)
5. AIR BIKE-2018(KP)

Every Day from 7:30-9:00 AM
45’-Brisk Walking at 6.5 km/hr on TMT
15’ Stationary Bike=10 km
5-10’ AirBike at High Resistance
Trials of 2018 Which Changed My Clinical Practice : Part-I

- DR. MILAN CHAG

**TAKE HOME MESSAGE**

- **ASCEND**: Among Diabetics without ASCVD, Aspirin reduced 3 point MACE with expected increase in risk of major bleeding. It did not reduce All-cause mortality.
- **ARRIVE**: Among high CV risk individuals without DM, Aspirin did not reduce Primary Endpoint (Death, MI, Stroke, UA) or all-cause Death and caused significantly high GI bleed.
- **ASPREE**: Among Elderly people > 70 years age, Aspirin did not reduce Primary Endpoint and caused significantly high bleeding. There was increased All-cause Death with Aspirin- primarily due to increased Cancer related death.
- ASCEND, VITAL and Meta-analysis of Omega 3- FA: Low to moderate dose of Omega 3-FA did not reduce CV events.
- **REDUCE-IT**: Among patients with established CVD or DM, Icosapent Ethyl in higher dose (2 gm, twice a day) reduced the risk of ischemic events, including CV death. Issues related to use of Mineral oil as placebo need to be kept in mind.
- **PIONEER-HF**: Among patients with ADHF, after initial in-hospital stabilization over 1 to 10 days, ARNI caused significant reduction in NT-proBNP without increase in S/E. Clinical outcome trial in future will be useful.
- **SCOT-HEART**: In patients with stable chest pain, CTA in addition to standard care, compared to standard care alone, resulted in a significantly lower rate of death from CHD or nonfatal MI at 5 years; this was without increased rate of CAG or Revascularization compared to standard care. This may be due to increased use of Statin in CTA group.
- **RADIAL**: For CABG, use of Radial graft compared to SVG was associated with significantly lower MACE and had increased patency rate at 5 year follow up.
Always calculate Ischemic (TIMI, GRACE) and Bleeding (CRUSADE) Risk….lot depends on that

Aspirin 75 mg/d and Tica 90 mg bd.....most suited DAPT for most except those with high bleeding risk

Fondaparinux has the highest safety-efficacy profile

All intermediate or higher risk patients be transferred to PCI / CABG capable center

**Minimize bleeding risk:**

- Dose as per age/kidney function, No GPI
- Aspirin 75-100 mg/d
- Triple therapy for max 4-6 weeks (Clopi > Prasu/Tica : NOAC>W)
- Radial route
- No to NSAIDs, Yes to PPI
What is CHIP in Cardiology? Why is it important for us to know about CHIP?

- DR. KEYUR PARIKH

**TAKE HOME MESSAGE**

Complex
High Risk
Interventional-Indicated

Procedures
- Identifying a potentially **under-served high risk population**
- **Raise awareness** of this “**high-risk**, under-served, complex population”
- **Advanced PCI skills** (training, case experiences, embrace collective wisdom)
- Use of **intravascular imaging** – OCT and IVUS
- Use of **physiologic lesion assessment**-FFR
- Use of **mechanical circulatory support**-ECMO
- Commitment to **evidence-based treatment and NOT publicity and media based practice**
My Father Has Multivessel CAD: How Should I Approach?

- DR. MILAN CHAG

**TAKE HOME MESSAGE**

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Cardiac MRI: An Emerging Modality
- DR. VIPUL KAPOOR

**TAKE HOME MESSAGE**

- MRI is the newest, most complex and rapidly emerging non-invasive test of choice for patients with a multitude of cardiovascular problems.
- Its emerging role as one of the dominant imaging modalities in most facets of clinical cardiology cannot be understated.
- It has entered an important phase in its evolution, with an anticipated exponential growth in its current applications and through the development of newer molecular imaging applications.
**TAKE HOME MESSAGE**

- Indications, Use and Contra-indications
- Structured Follow up
- Renal Function evaluation
- Liver Function evaluation
- Warfarin – NOAC switching
- Drug interactions
- Bleeding while on NOACs
- Life-threatening bleeds and Antidotes

- GI bleeding vs. Stroke risk
- Elective surgery while on NOACs.
- ACS, PCI while on NOACs
- Antiplatelets and NOACs Post PCI
- Stroke while on NOACs
- Restarting NOACs after Stroke
TAKE HOME MESSAGE

• Chest pain does not necessarily = Acute Coronary Syndrome
• Recognize DDx and clinical manifestations
• Rule out ACS/Dissection/PE/PTX
• Always remember criteria/contraindication of reperfusion
• Do not hesitate to discuss with your colleague cardiologist if you are in doubt
Preventing SCD Post Hospital Discharge for STEMI
- DR. AJAY NAIK

TAKE HOME MESSAGE

• Avoid placing ICD in 40 days post MI for primary prophylaxis
• (Early period in which non-arrhythmic risks factors are prevalent),
• Implant ICD in the later period in which it is effective for preventing arrhythmic deaths.
• Can implant after 40 days but prior to 90 days as needed.
• Consider Wearable Cardioverter Defibrillator in specific situations
Second Conduit in CABG - Is there any Silver Bullet?

- DR. DHIREN SHAH

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TAKE HOME MESSAGE

- Second best graft for CABG is in all probability the same as the first best—IMA, followed closely by RA.
- CABG conduit choice must be based on best evidence and not what is convenient and comfortable and profitable for the surgeon.

- Dr Clifford Barlow
Pre- and Post-stent assessment
1. Stent size selection and landing zone planning
2. Position, expansion, apposition
3. Intimal tear,
4. Dissection,
5. False lumen
6. Tissue prolapse
7. Calcification
8. Plaque type recognition

PCI follow-up
1. Strut coverage
2. Neo-intimal growth
3. Stent Restenosis
4. Stent Thrombosis
Can we Declare a Victory Against Cardio-Renal Disease in Diabetes?

- DR. MIKHAIL KOSIBOROD

**TAKE HOME MESSAGE**

- Fundamental paradigm shift in T2D management
- Several classes of glucose-lowering medications improve CV outcomes, with highly favorable benefit-risk balance
- SGLT2i – strongest and most consistent benefits on prevention of HF and progression of renal disease
- GLP1 RA – strongest and most consistent benefit on MACE
- These emerging data should shift focus of T2D Rx from HbA1c alone to comprehensive CV risk reduction
Sleep Apnea Disturbs the Rhythm of Heart

- DR. BHAVIN DALAL

**TAKE HOME MESSAGE**

AHI ≥ 15
(moderate-severe OSA)

AHI 5-14 + symptoms / co-morbidity (Mild OSA)
- Excessive daytime sleepiness
- Mood disorders or insomnia
- Impaired cognition
- Hypertension
- CAD / Stroke / Arrhythmia

“If you are confused, why not write an illegible prescription and hope the pharmacist come up with something”??!!!
Plenary Lecture VI - Management of STEMI: First 24 Hours An Update (An Indian Perspective)
- DR. SAMIR KAPADIA

**TAKE HOME MESSAGE**

- PCI trumps primary lytics except for FMC -> PCI > 120 min and low lytic stroke risk
- Data are evolving, but complete revascularization when feasible, physiologically driven and safe appears to be the best approach
- Role and timing of support devices as adjuncts to PCI is debated
- If lytics are given, patients should be transferred for cath/PCI urgently -> “pharmaco-invasive strategy”
- DAPT with prasugrel/ticagrelor (or cangrelor), early BB, ACE-I, statins are also important
- Protocols for care and systems for transfer are mandatory
- U.S. process most in need of improvement: patient -> FMC and DIDO times
- Timely reperfusion saves lives!
The 2017 ACC/AHA guideline updates the classification of blood pressure.

The importance of proper measurement is stressed.

Thresholds for treatment and BP targets are updated:

- Incorporation of ASCVD risk calculator to help individualize risk
- SPRINT data drive the change in guidelines...but not all will benefit from intensified BP goals
- My opinion: focus on 140 mmHg as a ‘ceiling’, 130 mmHg as a ‘floor’, and control other concurrent CV risk factors!
- Remember that guidelines are just that... not mandates
- Don’t forget the importance of using your clinical reasoning to individualize BP targets!!
Infective Endocarditis - Update
- DR. ANISH CHANDARANA

TAKE HOME MESSAGE

- Potentially a serious and complex multi-system disease syndrome
- Needs a team work of many specialists
- Good Echo (TOE) and properly obtained blood cultures are must.....
- Antibiotics....Agent, Dose, Frequency, Duration
- Indications and timing of cardiac surgery...tough challenge
- Prevention is better than cure....Hygiene and Aseptic precautions
Marital Status, Smoking 1 Cigarette a Day, Dark Chocolate, Almond, Pollution, Sweetening Agents and CVD

- DR. VIPUL KAPOOR

**TAKE HOME MESSAGE**

- Married men and women do better than single or unmarried ones as far as CVD prevention and mortality is concerned.
- No safe level of smoking exists for CVD.
- Dark chocolates and Almonds alone or in combination are good for CVD.
- Pollution is a silent killer—undetected and underdiagnosed CVD risk factor.
- Sweetening agents can be harmful if not used judiciously.
Stress cardiomyopathy is an acute cardiac disorder with a transient left ventricular wall motion abnormality, and it must be promptly differentiated from ACS.

- Stress cardiomyopathy has an in-hospital mortality of up to 5%.
- Recurrences are common- 2% to 4% per year and up to 20% at 10 years;
My Approach to Case of Syncope

- DR. HYGRIV RAO

**TAKE HOME MESSAGE**

- Syncope evaluation has to be broad & multi dimensional. Management aims to:
- To exclude causes of Sudden Cardiac Arrest/Death
- To pick out Curable & treatable entities
- To Reassure the patient and relatives
- *Try* to make a definite diagnosis
In patients with type 2 diabetes who had or were at risk for ASCVD, treatment with Dapagliflozin did not result in a higher or lower rate of MACE.

It led to significant lower rate of hospitalization for heart failure and lower rates of progression of renal disease.

There was no increase in Amputation, fracture or stroke.

S/E: increased DKA and genito-urinary infection.
• There are several imaging modalities available for the evaluation of HF patients, each one with its highlights and pitfalls.

• Echocardiography continues to be the method of choice for its availability, cost and usefulness, it provides most of the information required for the management and follow up of HF patients and it has been enhanced with the development of 3DE and strain.

• Other non-invasive cardiac imaging modalities could provide additional aetiological, prognostic and therapeutic information, being helpful in making treatment decisions, especially in some subsets of patients (ischaemic heart disease, cardiomyopathies).

• An appropriate utilisation of imaging procedures should improve management and clinical outcomes in HF patients.
DAY-3
Neuromodulation in Management of Ventricular Arrhythmia Storm
- DR. AJAY NAIK

TAKE HOME MESSAGE

- Autonomic dysregulation contributes to the initiation and maintenance of VAs.
- Neuromodulation is a promising intervention for these life-threatening arrhythmias.
- Present data suggests a clear benefit for refractory MMVT/PMVT/VF.
- Further studies are needed to continue to optimize these interventions, making them less invasive and more universally applicable.
Pediatric arrhythmias represent a challenging scenario.

Management may range from reassurance, medications to interventions in the form of EP studies, RF ablations and Device implantations.

Experience and Insight and paramount to ensure a good outcome.
• ODYSEY OUTCOME: Among Post-ACS patients on high intensity statin and LDL> 70 mg/dL, Alirocumab reduced MACE when target LDL was 25 to 50 mg/dL.
• In the subgroup with baseline LDL >100 mg/dL, it reduced MACE, all-cause death, and CHD death without any major S/E.
• CIRT: Among patients with stable atherosclerosis, low-dose methotrexate (acting on IL-6 pathway) did not reduce levels of IL-1ß, IL-6, or CRP and did not result in fewer CV events.
• Even though a negative trial, it clearly showed us the pathway to work on: it is IL-1ß and not IL-6.
• DM and CV Risk (Swedish Diabetes Registry): Among patients with Type 2 DM who had five risk-factor variables within the target ranges appeared to have little or no excess risk of death, MI, or stroke, as compared with the general population.
• The risk of hospitalization for heart failure was consistently higher among patients with diabetes in spite of all five risk-factor variables within the target ranges.
• ASCEND, VITAL and Meta-analysis of Omega 3- FA: Low to moderate dose of Omega 3-FA did not reduce CV events.
• REDUCE-IT: Among patients with established CVD or DM, Icosapent Ethyl in higher dose (2 gm, twice a day) reduced the risk of ischemic events, including CV death. Issues related to use of Mineral oil as placebo need to be kept in mind.
• DECLARE-TIMI-58: In patients with type 2 diabetes who had or were at risk for ASCVD, treatment with Dapagliflozin did not result in a higher or lower rate of 3-point MACE.
• It led to significant lower rate of hospitalization for heart failure and lower rates of progression of renal disease.
• POET: In patients with endocarditis on the left side of the heart who were in stable condition after initial IV antibiotics, changing to oral antibiotic treatment was noninferior to continued IV antibiotic treatment.
• CAMELLIA-TIMI-61: In a high-risk population of overweight or obese patients, Lorcaserin (a selective agonist of 5HT3C receptor which regulates appetite) was useful for sustained weight loss without a higher rate of major CV events (the first drug with proven safety).
• Need to be watchful for development of Valvulopathy and PAH on long-term
My Approach: Accelerated HT
– DR. VIPUL KAPOOR

TAKE HOME MESSAGE

• Hypertensive Crises are common
• Differentiate Hypertensive Urgency from Emergency on the basis of end-organ damage
• Can treat hypertensive urgency with oral antihypertensives, but parenteral medications required for hypertensive emergencies
• 25% reduction in diastolic BP over 2-6 hours for hypertensive emergencies
• Recommended parenteral antihypertensive agents (IV drip) for Hypertensive Emergencies and admission to ICU
• Nitroprusside (cautious about cyanide toxicity), Nicardipine, and Labetalol.
• Once BP controlled, switch to oral anti-hypertensives and follow-up closely.
My Approach: To A Case of Aortic Stenosis with CKD

- DR. KEYUR PARIKH

TAKE HOME MESSAGE

Voigtländer et al, recently studied the influence of kidney function before TAVR on the AKI incidence in 540 patients. There is a modest increase in GFR in the moderately impaired renal function group and a significant increase in GFR in those with severe decreased renal function. There was no change in GFR after TAVR in patients with normal renal function. Improvement of GFR was also demonstrated at one month following TAVR in patients with preexisting CKD, possibly due to the improvement of cardiac performance following correction of valvular disease.

- Preprocedural CTA-Replace with Non Cotrust CTA or Ultra Low Contrast CTA or MRA
- TAVI preferably performed by transfemoral approach.
- Procedural Peripheral Aorto-Iliac angiography-AVOID by using manual puncture using CrossOver wire technique and use of CTA/MRA frames inside the Cathlab in a viewBox
- Use 18 F Sheath preferably in the Groin
- Aortic Root Angiography-AVOID with use of TEE
- Positioning of Valve “check shoots”-AVOID with use of TEE and proper Pigtail positioned in the NCC as landmark
- Post placement Aortic Root Aortography-AVOID with use of TEE
- Post procedure Peripheral Aorto-Iliac angiography-AVOID with use of Manual Paplation and USg-Doppler if required
- Proper hydration is very important, if tolerated
TAKE HOME MESSAGE

- An unknown disease, CMI carries significant morbidity and mortality if not identified early in its course.
- Endovascular revascularization appeared as effective as, and safer than, open surgery to treat this condition.
- OSR has been traditional treatment of choice in CMI, and still remains so for low risk patients, for certain lesion types (e.g., flush occlusions), for patients with recurrence despite multiple PEVT attempts, or for patients with non-atherosclerotic CMI.
- For many high surgical risk patients, PEVT is becoming the preferred treatment in atherosclerotic CMI due to reduced peri-operative morbidity and mortality compared to OSR.
- PEVT has acquired a Class IB recommendation by the ACC/AHA for the treatment of CMI.
- In the era of rising atherosclerosis incidence and prevalence, greater knowledge of CMI and PEVT amongst practitioners is necessary to advance minimally invasive therapies as alternatives to open surgery in selected patients.
- **In Summary**, stenting of mesenteric arteries is a safe and effective method for the treatment of patients with CMI. With the recent improvement of the endovascular equipment and technical skills, endovascular revascularization of mesenteric stenosis can be a minimally invasive alternative to surgery.
My Approach: Acute Heart Failure

- DR. ANISH CHANDARANA

**TAKE HOME MESSAGE**

- ADHF continues to be a common and difficult problem
- Diagnosis in ER is a combination of science and arts!
- Find out and attend to Etiology and Precipitating Factors
- Judicious use of Diuretics, Vasodilators, Inotrops & Vasopressors is still the way to treat
- Make timely use of Intervention and Surgery when needed
- Before discharge counseling regarding “DEDO”: 
- Diet, Exercise and Drugs (Optimized doses) ACEI / ARB, BB, AA, Loop Diuretic, Digitalis (+ AP, Statin, other) help to prevent readmission and improve prognosis
My Approach: Simple Procedure - Life Threatening Complication

- DR. TEJAS V PATEL

TAKE HOME MESSAGE

- Covered stent is useful for sealing of large venous perforation/contusion where the venous site is not easily assessable for compression [Prolonged balloon inflation is also useful especially for small venous perforation, and should be considered to avoid stent]
- Venous cannulation should be done under sonography guided whenever possible
- Key principle of any guidewire manipulation is – ‘NEVER PUSH’
My Approach: Should every Lesion be Fixed? - Anatomical versus Physiological Assessment of Coronary Artery Disease
- Dr. Satya Gupta

**TAKE HOME MESSAGE**

- Based on current available literature and knowledge, ischemia guided revascularization is preferred
- FFR is fairly reliable to assess physiological ischemia
- All lesion which seen on conventional angiography do not required to be fixed
- Ischemia guided therapy results in avoidance of unnecessary stenting and bypass surgeries
An Overview of Snake Bite in India, Case Based Approach  
- DR. SURESH KHATOD

**TAKE HOME MESSAGE**

- Continuous monitoring of pt is the key of success.
- Snake bite is a clinical problem where attending physician`s judgments is most important.
- Laboratory investigations are hardly useful.
- Snake bite is a medical emergency where time is the “life”
- If treated timely and properly no pt of snake bite should die.
A Case Report of Superior Mesenteric Artery Thrombosis

- DR. SAPNA GUPTA

**TAKE HOME MESSAGE**

- Recognition of AMI before permanent tissue damage
- Angiography or exploratory surgery for early diagnosis
- Availability of CT round the clock
- Hybrid operation room
- Endovascular recanalization and stenting—specially in elderly and fragile patients
- Damage control surgeries for intestinal revascularisation.
Successful Management of Aluminum Phosphide Poisoning: Report of Two Cases

– DR. SNEHA VADHVANA

TAKE HOME MESSAGE

- In India, most of the patients who come with Celphos (trade name for Aluminium Phosphide) poisoning succumb to its toxicity because of the considerable time gap between the ingestion of the poison and the initiation of proper resuscitative treatment.
- which include early gastric lavage and strict monitoring of vitals and all laboratory parameters.
- As there is no ANTIDOTE for the alphos and its high mortality rate..it is preventing physician to treat patient wholeheartedly.
- Our motto of presenting this case is to eliminate the skepticism among physician while managing a case of alphos that alphos is having 100% mortality and poor outcome.
A case of brain death dilemma

- DR. DHRUV M PATEL / DR. MUKUND PATEL

**TAKE HOME MESSAGE**

- Patient sleeping on floor bed in open area of farm house with midnight abdominal pain, perspiration, and vomiting followed by early morning locked in syndrome with absent brainstem reflexes should be diagnosed as krait bite neuroparalytic envenomation even in absence of snake bite history or absence of flang marks on body surface, if there is no alternate disorder which support the clinical diagnosis.
- Neostigmine challenge test may support the diagnosis, but the ASV treatment should not be delayed even if the test is negative. Because krait venom binds at both pre and post synaptic level as per alpha and beta bungarotoxin ratio of the venom, while neostigmine reverse only post-synaptic blockage