SING LIVE 2024
LIVE CASE FROM SRI LANKA

Clopidogrel loading in ETU before PPCI

A THERAPEUTIC DEBATE
FOLLOWING ESC 2023 ACS GUIDELINES

BIT
LIVE CASES FROM SRI LANKA

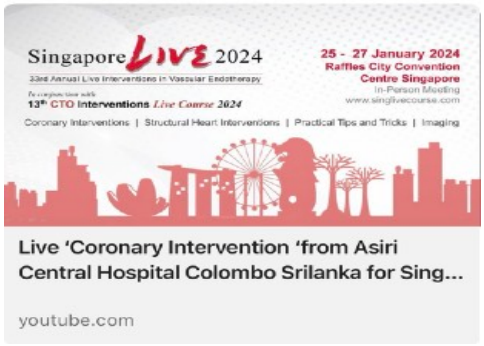
Diagnosing HFmrEF and HFpEF

A DIAGNOSTIC DILEMMA
IN THE SRI LANKAN SETTING

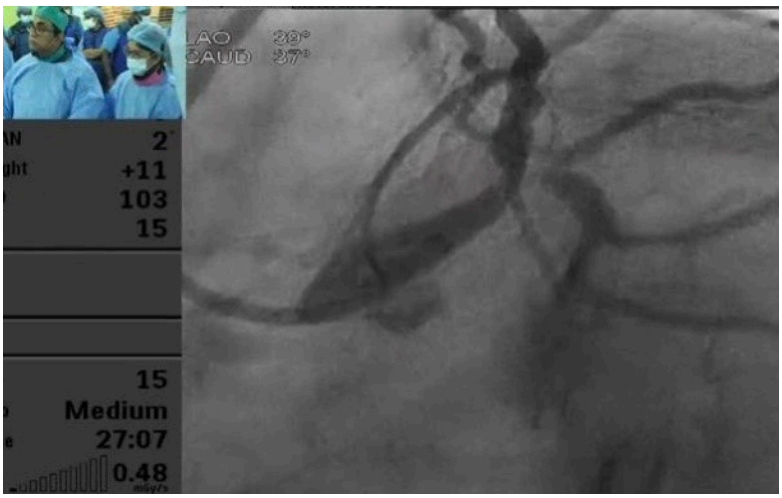
SLCC NEWS

SLCC at Sing Live 2024

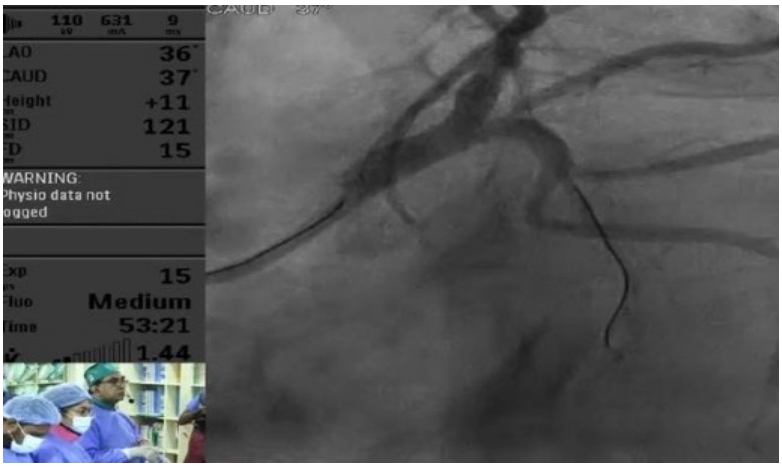
A distal left main bifurcation PCI performed by Dr Vajira Senarathne and Dr Tanya Pereira at Asiri Central Hospital was live transmitted from Sri Lanka at the SingLive 2024 on the 26th Jan. The discussion panel from SL at the Raffles City Convention Centre Singapore included Dr S Shantharaj [co-chair], Dr Stanly Amarasena, Dr Mohan Rajakaruna, Dr Gotabhaya Ranasinghe and Dr Chandrike Ponnamperuma.



https://youtube.com/live/acULunz-upI?feature=share



A 34 y farmer with CCS who had a distal LMCA Medina 1-1-1 stenosis was presented by Dr Ajith Wanniarachhi. The panel and operators discussed the pros and cons of upfront two stent strategy as per the EBC-Left Main trial and decided on provisional single stenting of LMCA to LAD with a DES after performing cutting ballon dilatation of the LCX ostial plaque and drug eluting balloon dilatation with IVUS guidance. IVUS expertise was by Dr Sharath Reddy . This successful outcome was appreciated by the panel and participants.



A Therapeutic Debate-

To give or not to give P2Y12 inhibitor loading doses at the ETU prior to PPCI

Pre-treatment with platelet P2Y12 inhibitors for PPCI patients was considered the standard of care. PCI registry data showed that clopidogrel pre-treatment >> 3

Editorial

We start off the New Year 2024 edition of SLCC News reporting the first ever live PCI transmission to SingLive from Sri Lanka, which was a great success. Congratulations to the SL operators, panellists and the teams behind this event which proudly placed SL and the SLCC on the international interventional arena!. After this successful pioneering effort, we hope many such opportunities will follow, to showcase SLCC members' skills and expertise. BIT is round the corner with 3 live cases from SL, and we wish the best for the SL operators!

This issue opens two clinical discussions arising from the ESC 2023 guidelines updates.

Joining the debate about the usefulness or not of pretreatment with P2Y12 inhibitors for PPCI patients, we turn to advice from across the Atlantic in the ACC/ AHA guide lines.

On the dilemma of diagnosing HFmrEF and HFpEF in SL clinical practice where BNP/ NT-pro BNP assays are difficult to come by than an echocardiogram for LVEF, we look for surrogate markers of raised LVEDP. Both reference articles are linked here, and the link to the full video of the LMCA PCI live transmission.

We hope you find this January edition both informative and educational.

Editorial desk-

gamini_galappatthy@hotmail.com

0710604200- WhatsApp

Pre- treatment with P2Y12 receptor inhibitors in ACS- Is the current standpoint of ESC experts sufficiently supported?

- J.Clin. Med 2023,12,2374.

2>>reduced ischaemic events and early stent thrombosis.

The ESC 2023 ACS guideline has now down graded pre-treatment with P2Y12I for PPCI as a Class 2b indication. This is believed to be largely based on ATLANTIC study with ticagrelor loading for PPCI which showed no improvement in ST resolution or TMI flow before intervention, with ticagrelor pre-treatment vs loading dose given at the time of PPCI.

It is known that platelet inhibition is crucial at the time of stenting to prevent PCI associated endothelial injury causing thrombotic complications. Pre-treatment loading dose of Clopidogrel 600 mg as used commonly in SL for PPCI, takes many hours to peak. A more rapid action is expected with prasugrel and ticagrelor loading, while IV cangrelor with almost an immediate effect but short duration of action is not available in SL.

Recently, citing the 2023 ESC ACS guidelines, giving pre treatment with clopidogrel was stopped at the NHSL ETU for patients sent for PPCI to the Cardiology Unit Cathlab. This sparked a therapeutic debate and presently P2Y12I pre-treatment is given at the ETU if requested, at the discretion of the PPCI team. Transferred patients from other hospitals for PPCI would usually receive clopidogrel loading prior to transfer, in the SL setting.

In the ATLANTIC study using ticagrelor loading the mean time difference between FMC pre- treatment arm and on table arm was merely 31 minutes, and may have affected the negative results of showing no additional benefit with pre treatment. These fast time scales are hard to achieve in the SL setting with long time delays, and the study result may not apply to clopidogrel pre-treatment.

In SL, only about 5% of the estimated annual 20,000 STEMI patients undergo PPCI according to the ACSSLAP national audit. Thus, it would be an important decision for the approximately 1000 PPCI patients whether pre treatment with clopidogrel loading is warranted or should be withheld until after the coronary angiogram.

- Dr Chathuri Kankanamge Medicine Reg, Dr Subhani Poornima Cardiology SR, Dr Gamini Galappatthy CC

Diagnostic Dilemma-

How do you diagnose HFmrEF and HFpEF?

Heart failure with reduced ejection fraction HFrEF is easily diagnosed in a symptomatic patient by an echo study showing LVEF < 40%.

The ESC HF guidelines recommend BNP/ NT pro-BNP as the diagnostic first step in a symptomatic patient to diagnose HF, and to exclude HF if BNP/ NT pro-BNP level is normal. >>5

3>> In a patient with heart failure symptoms and an elevated BNP/ NT-pro-BNP level, HFmrEF or HFpEF is diagnosed if LVEF is 40-50% or >50% respectively.

In SL, BNP/ NT-pro BNP levels cost approximately Rs. 10,000/- and is not available in government hospitals. The first line investigation in a patient with HF symptoms in SL is usually the echocardiogram for LVEF, and 'heart failure' could be missed if LVEF is 'good'.

Treatment with SGLT2I are now proven beneficial across the full HF spectrum. As such, surrogate markers of elevated LVEDP are important to suspect and diagnose HFmrEF and HFpEF in the SL setting.

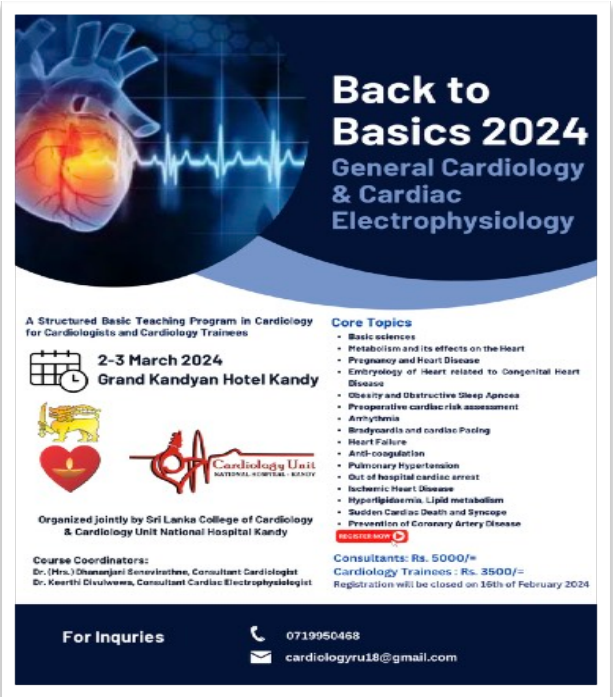
How to Diagnose HFPEF: The HFA-PEFF Diagnostic Algorithm: A consensus recommendation from HFA of ESC

- Eur Heart J 2019;40:3297-3317

ESC HFA -PEFF algorithm recommends surrogate markers of elevated LVEDP as minor criteria to be used for diagnosing HFmrEf and HFpEF. These include MV E/E' ratio, LA dilatation, LV mass index, TR PG which could be useful in the SL setting.

The gold standard remains cardiac catheterisation to directly measure PCWP and/ or LVEDP.

- Dr Subhani Poornima cardiology SR, Dr Gamini Galappatthy CC



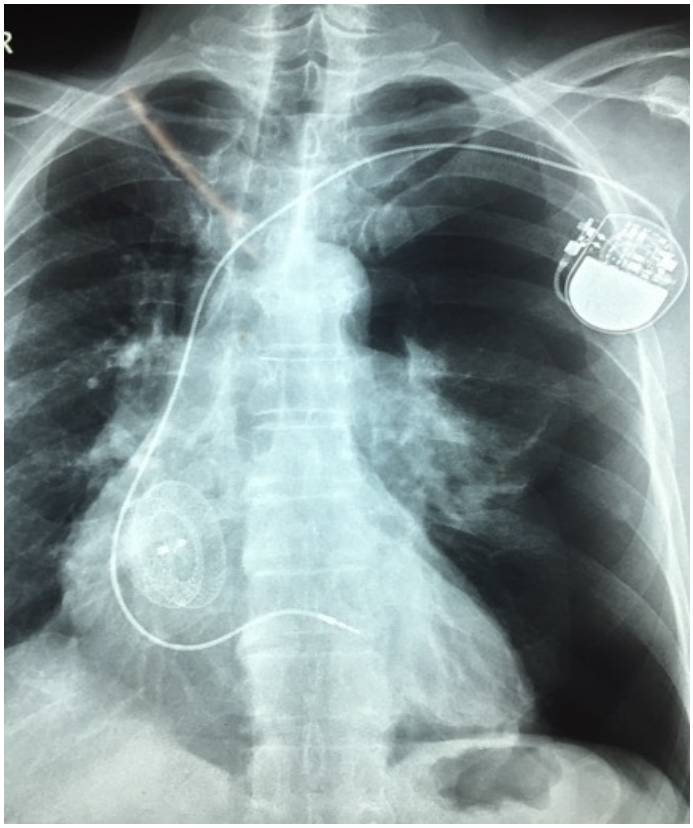
You too can submit to the SLCC newsletter. We are looking for-

Posters authored by SLCC members presented at cardiology conferences.
Clinical quiz with interesting ECG, Xray, Echo or angio images authored by members.
Creative content-original art, artistic photography, and short prose authored by SLCC members.

CARDIO QUIZ

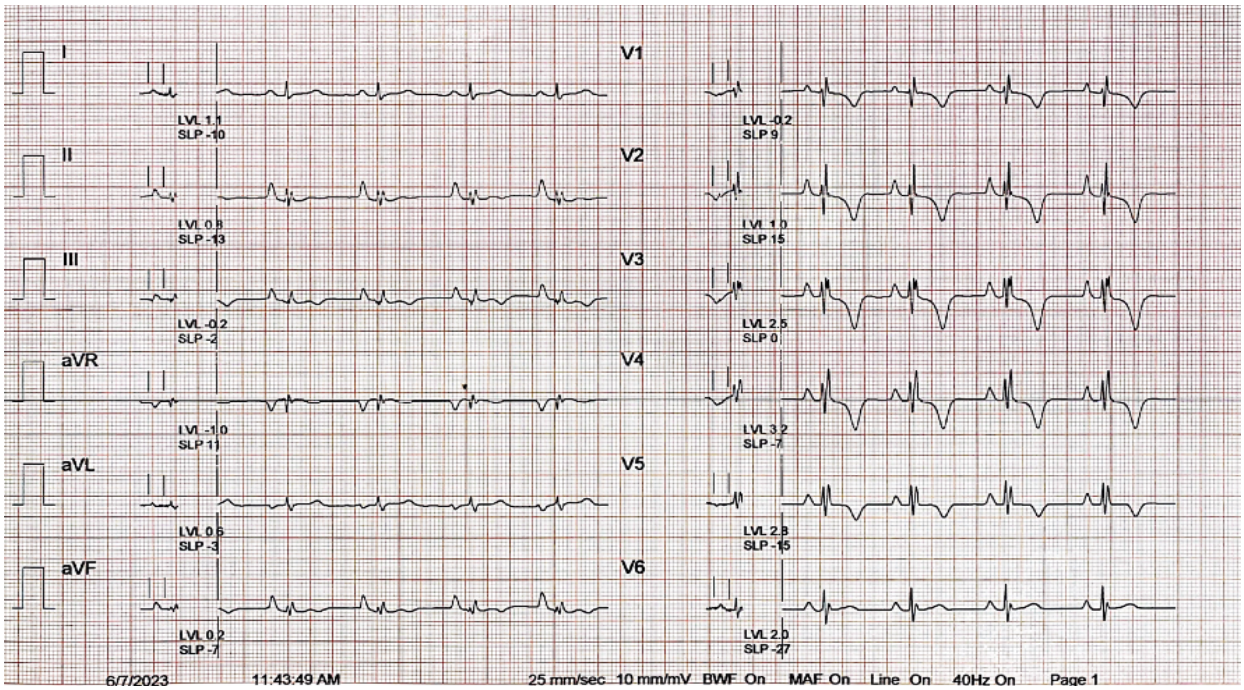
X-Ray Quiz

A 50y man became dyspneic soon after PPM implantation. What abnormalities are seen in his chest X-ray?



ECG Quiz

A 25 y woman was referred for an echocardiogram because of ECG changes. What will her echo show?



Answers to Cardio Quiz -

Image Quiz- L side tension pneumothorax during left subclavian puncture, CIED, ASD device.
ECG Quiz- ARVD. ECG shows typical T inversion without RBBB and epsilon wave in V1-3.