BEAUMONT HOSPITAL

ACNAP Clinical Case Excellence Award 2020

SCAD: An often overlooked diagnosis

Declaration of Interest (DOI).

We have no conflict to declare.

Paul Stoneman
Fiona Colbert
Joseph Adams

Presentation, physical exam, vitals & risk profile:

Presenting History

- *0700 hours phoned to review* a 41 Female
- Complaining of severe constricting tightness
- Radiating bilaterally to arms and throat
- Associated with dyspnoea and nausea.
- Onset 2 hours prior to ED presentation
- First ever event
- No preceding exertional symptoms

EXAM

- ✓Lungs clear
- ✓HS I-II nil added
- ✓NO JVP
- ✓No Pedal oedema
- ✓Equal radial pulses
- ✓Patient
- ✓Diaphoretic
- ✓Cold
- ✓Clammy to the touch.

VITALS

BP 159/99
HR **120**
RR 22
SPO2 99%
TEMP 36

Cardiovascular risk factors

- ✓ Non smoker
- ✓ NON diabetic
- ✓ No familial history CVD/ SCD
- ✓ No history HTN/ dyslipidaemia
- ✓ Fit & Active

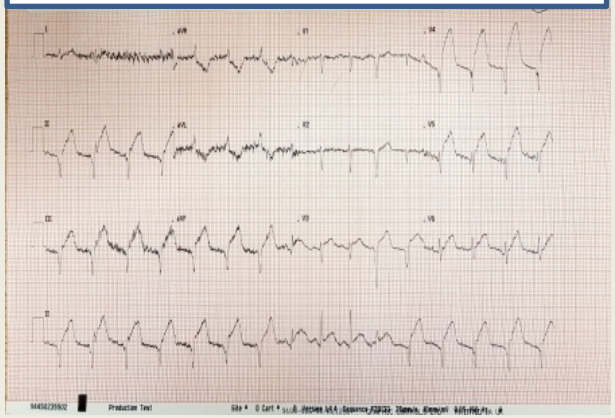
= ✓LOW CVD RISK

History

Seven weeks post-partum, currently breast feeding

Point of care findings: ECG, Point of care transthoracic ECHO & Angiogram results

FIG 1: Presenting ECG



Idioventricular rhythms

Figure 1 &2 denotes the presenting ECGs which demonstrate an accelerated Idioventricular rhythm. It is Widely accepted that Sgarbossa's criteria may be applied to Idioventricular rhythms in the same way it is applied to paced rhythms and left bundle branch block.
This technique was applied to Figure 1 and 2 and determined to meet Sgarbossa criterion for STEMI

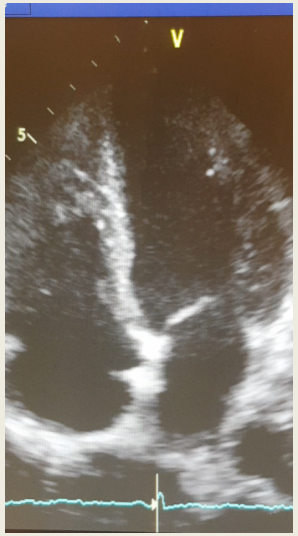
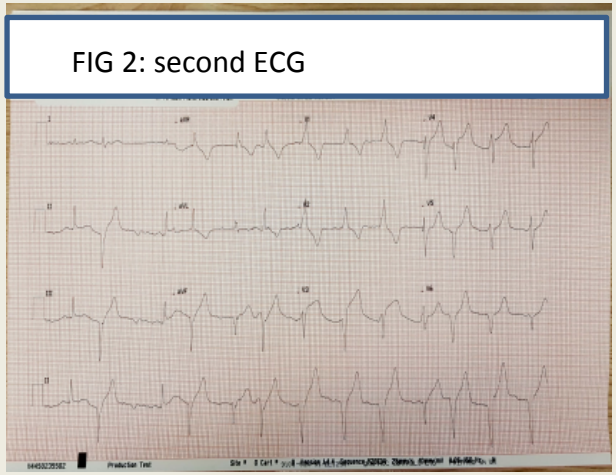
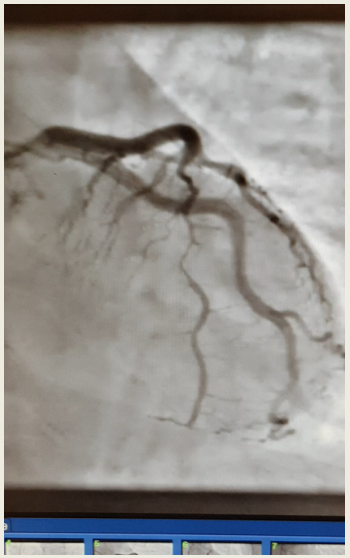


FIG 2: second ECG



- **Rate usually 20-40 bpm (>40bpm accelerated)**
- **Rhythm = REGULAR**
- **P WAVE = NONE**
- **QRS = WIDE >130ms**



A structured approach to patient assessment is vital and consisted of the following:

MOVIE: Monitor – O2 – Vitals – IV – ECGs – including Focused cardiac history+ EXAM + allergies + medication list

POCUS (Point of Care Ultra Sound) used to quickly evaluate and differentiate between:

- Gross structural – function – valve pathology and effusions
  - **PE?** Check – RV size - TAPSE (function) – TR? – plethoric IVC – *McConnell's sign*
  - **Takotsubo?**: Is there apical sparing to suggest this
  - **MI?** Check for impaired function and regional wall motion abnormalities (hypokinesis/ akinesis)
  - **Sudden Coronary Artery Dissection (SCAD)** Check for impaired function and regional wall motion abnormalities (hypokinesis/ akinesis)
  - **Thoracic Dissection?** Dilated LVOT with/ without flap, aortic coarctation

The Diagnosis & Management: Sudden Coronary Artery Dissection

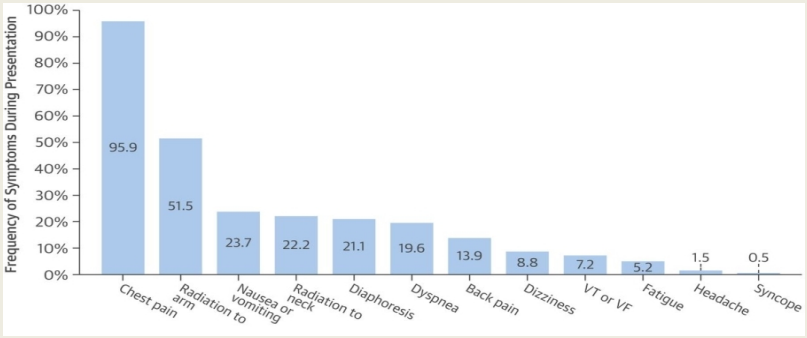
Who does the condition usually effect?

- ✓ Female
- ✓ 30 – 50 years old
- ✓ Often no cardiac risk factors

Why does it occur?

- ✓ 30% peri-partum: pregnant or post partum
- ✓ Some have connective tissue disorder (marfan's, Ehlers-danios, fibromuscular dysplasia/ FMD)
- ✓ Often no known case at all!

What are the common symptoms?



What Was the treatment & what are the common treatments?

Initial treatment

- Confirm diagnosis – Stablise -& fast-track for coronary angiogram
- Treatment was Medical management in this case however can include:
  - CABG
  - PCI

POST SCAD

- Clopidogrel OR Prasugrel + Aspirin – COMBINATION
- Clopidogrel OR Prasugrel OR Aspirin ALONE
- Other combination of medications – Betablocker – ACE - Statin

LONG TERM

- Medication for life OR one year – 2 years depending of initial treatment

The take home message.....

- ✓ Most clinicians have never treated or diagnosed a SCAD patient – they are more likely to slip through the net!
- ✓ Most people not aware of SCAD – don't be the one that says – they are too young, too fit, too female, too pregnant or too far postpartum for heart issues
- ✓ Think SCAD when: *Fit, female, low CVD risk*