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MEDICAL EMERGENCIES #1

26/06/2013   Herman Tam   hht108@ic.ac.uk   FY1
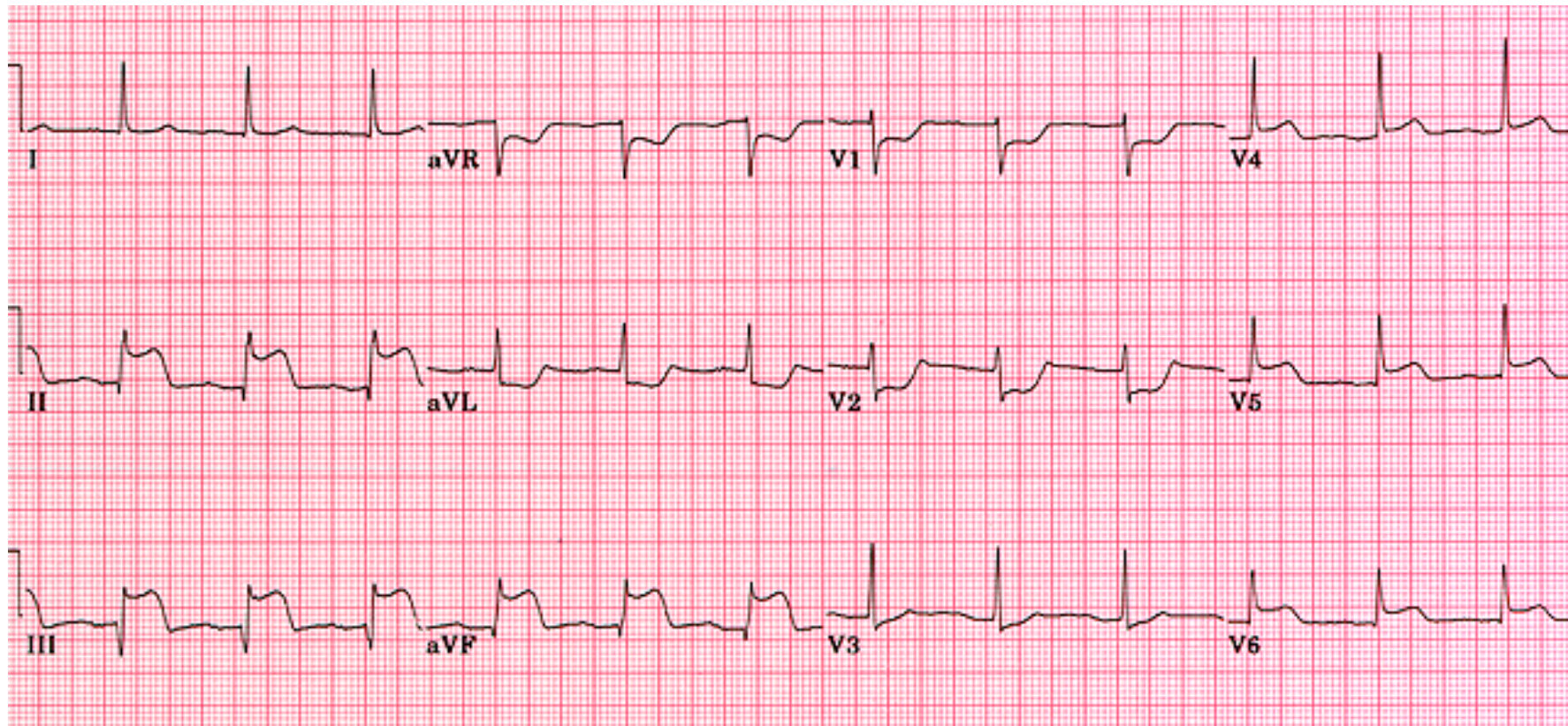
Outline

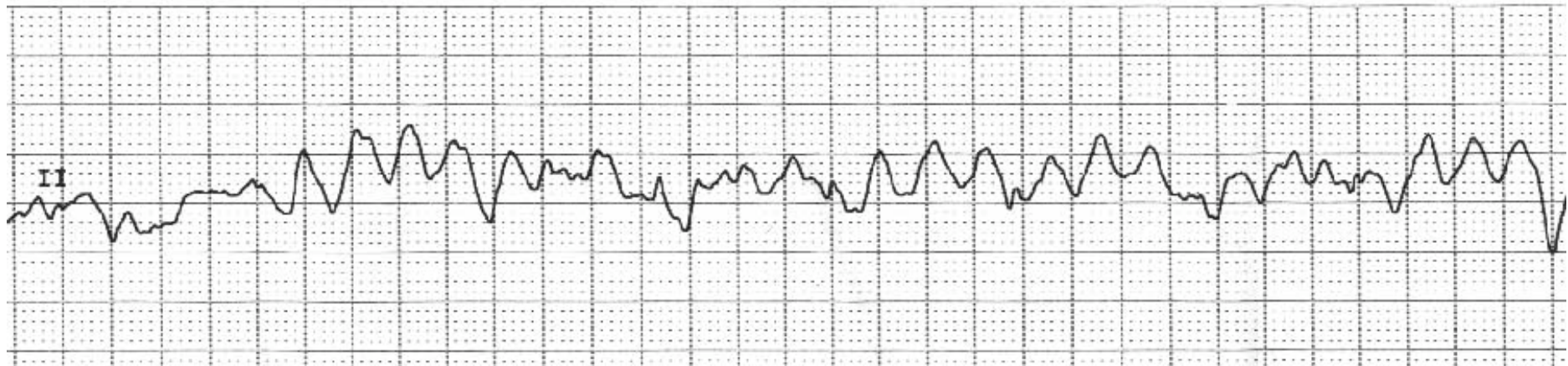- ☐ Scenario - 10 minutes

- ☐ Analysis

Scenario

- 4 volunteers

  - 2 attend scenario substitute at 5 minutes

  - 2 to write drug charts, investigation requests

  - Purposeful observations

- "You're the on-call medical FY1 and your bleep goes off at 0300.

ECG 1

ECG2

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ABG

☐ pH	7.35		☐ Na	137
☐ pO2	10		☐ K	6.8
☐ pCO2	5.5		☐ Cl	100
☐ HCO3	20		☐ Glu	8.5
☐ BE	-2.0		☐ Lac	2.0

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Well done!

Learning Objectives

- ☐ To assess the patient with ACS using a focused approach

- ☐ To initiate immediate ACS treatment

- ☐ To recognise cardiopulmonary arrest and put out arrest calls

- ☐ To appreciate the FY1 role in arrest call

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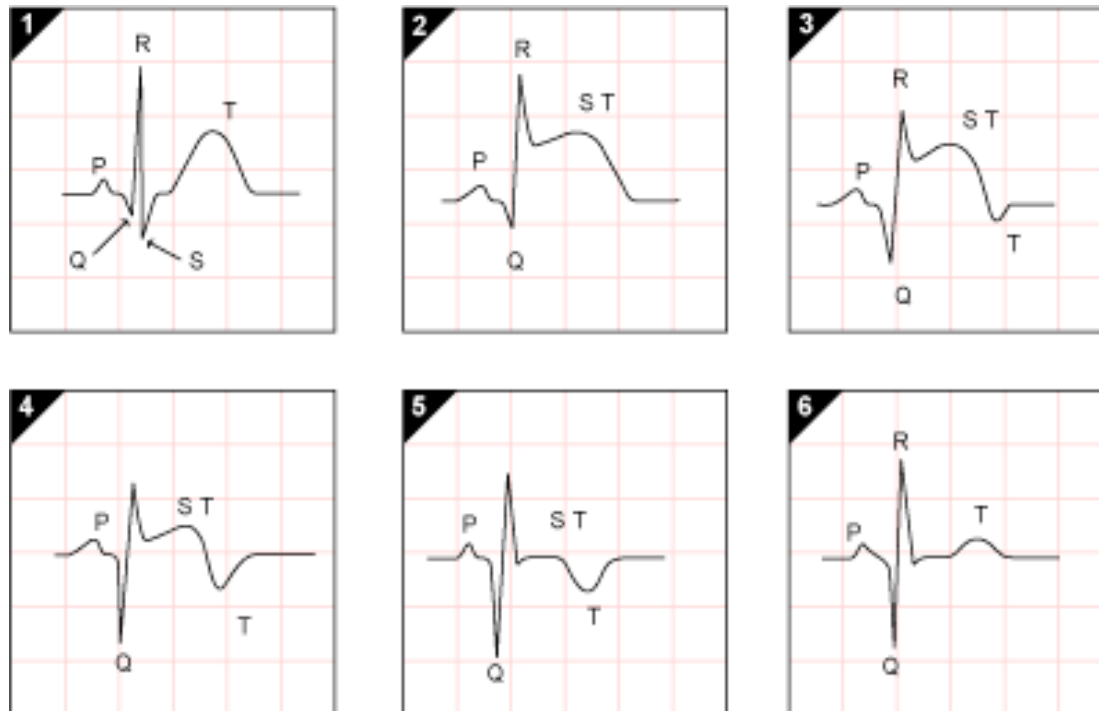# Focused approach to ACS

- Before you see the patient
  - Obs
  - ECG
  - GTN if on DH
  - Notes

Focused approach to ACS

- With the patient
  - ABCDE
    - Obs
    - Analgesia
  - Brief history
    - Pain history
    - RFs
    - PMH
  - Focused exam
    - pale, sweaty
    - Cardiovascular system

Ix - ECGs

- Serial ECGs

- Previous ECGs

- Cardiac Monitoring

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Ix - Bloods

- ☐ FBCs

- ☐ U&Es

- ☐ Troponin

- ☐ Repeat Troponin (12hr)

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ACS Diagnosis

□ 2 of 3:

- □ History

- □ ECG

- □ Troponin

□ May have to treat before Troponin levels are back

ACS Treatment

- Aspirin   300mg stat

- Clopidogrel   300mg stat

- S/C LWMH

- Oxygen

- IV Morphine   5mg stat

- IV Metoclopramide   5mg stat

- STEMI – consider PCI or Thrombolysis
  - Refer to closest Cath lab

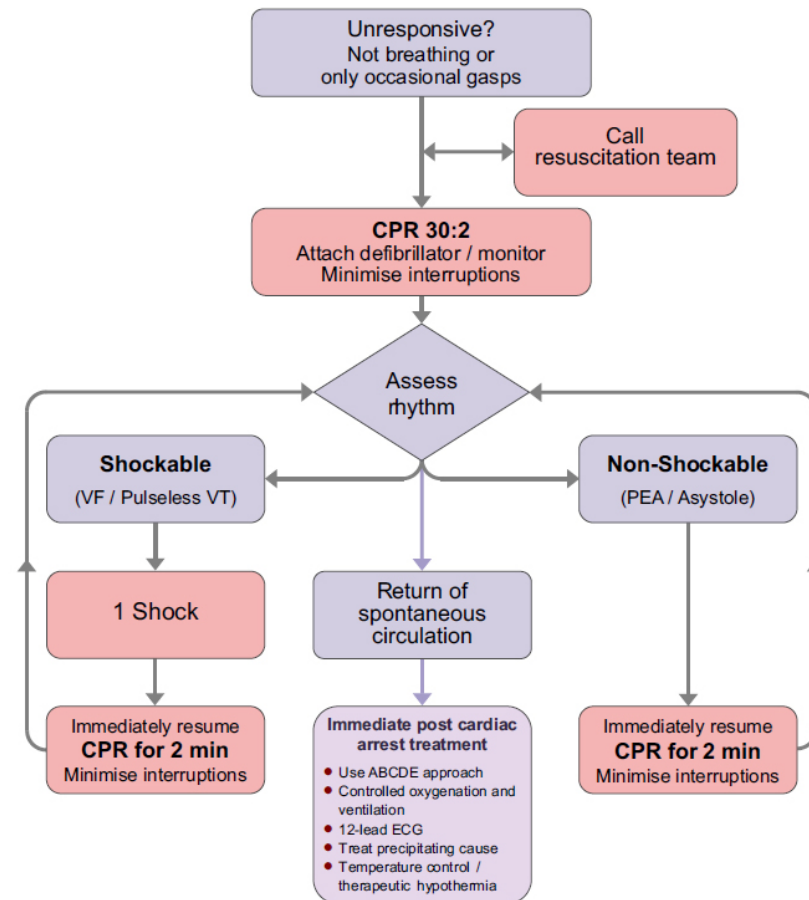# Recognizing cardiopulmonary arrest

- Most in-hospital cardiac arrests have warning signs and symptoms

- Some preventable early recognition and treatment

- ABCDE approach to assess and treat critically ill patient

- 2222 arrest call!
  - location, type of call, resus trolley

Role of FY1 in arrest calls

☐ Usually supportive unless alone

- ☐ Compressions

- ☐ Vascular access

- ☐ ABGs

- ☐ Post-resuscitation care

  - Order Ix (bloods, CXRs)

  - Old notes

  - Explain to family

☐ Follow ALS algorithm

Unresponsive?
Not breathing or
only occasional gasps

Call resuscitation team

CPR 30:2
Attach defibrillator / monitor
Minimise interruptions

Assess rhythm

Shockable
(VF / Pulseless VT)

Non-Shockable
(PEA / Asystole)

1 Shock

Return of spontaneous circulation

Immediately resume
CPR for 2 min
Minimise interruptions

Immediate post cardiac arrest treatment
• Use ABCDE approach
• Controlled oxygenation and ventilation
• 12-lead ECG
• Treat precipitating cause
• Temperature control / therapeutic hypothermia

Immediately resume
CPR for 2 min
Minimise interruptions

Summary

- Focused management of ACS
  - practical FY1 tips

- Recognise cardiopulmonary arrest and call for help
  - 2222
  - Compressions
  - Follow ALS algorithm (get on course early!)

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Questions?