

MMC trial SAQ 2015.1

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SAQ 22

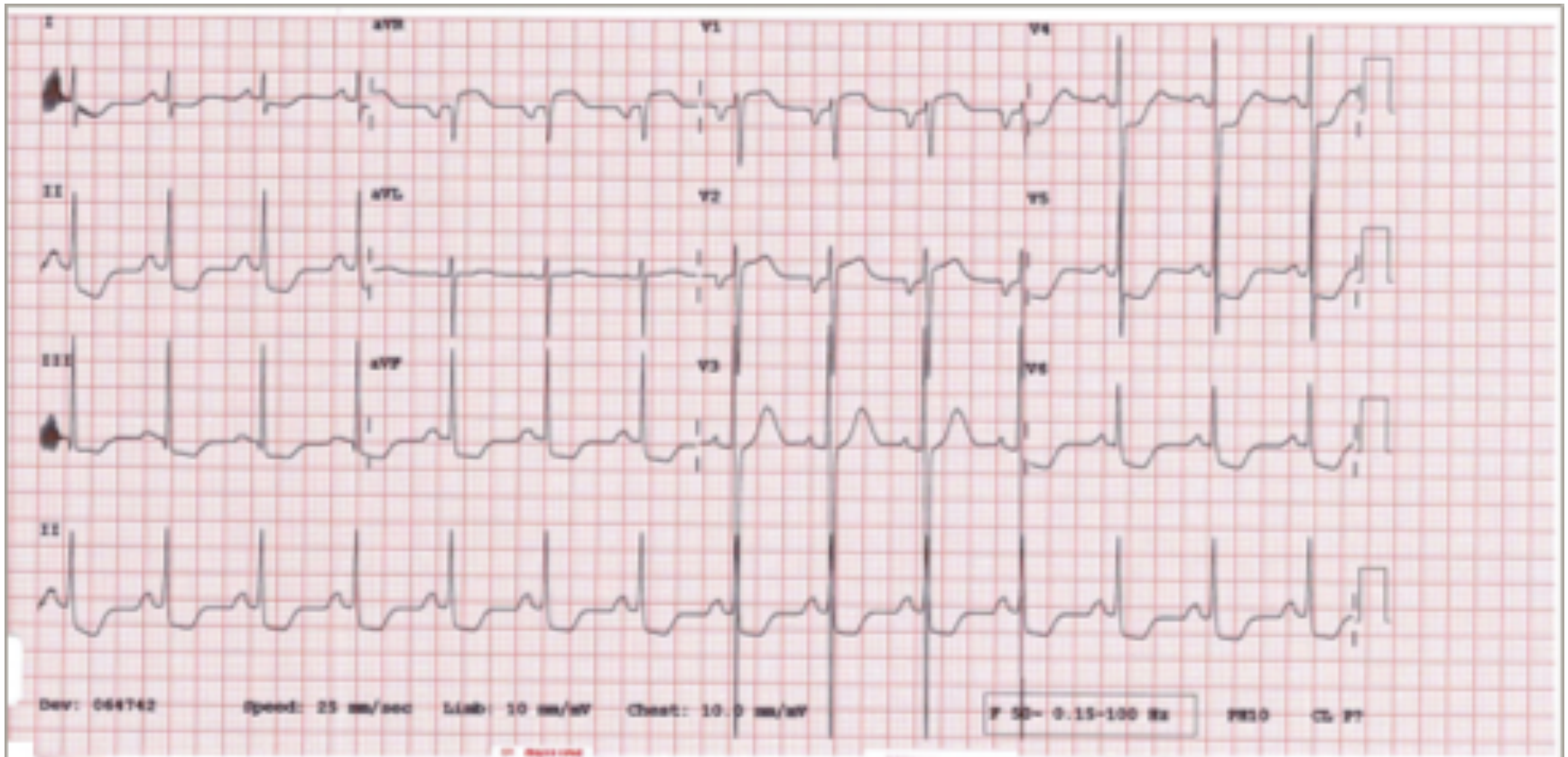
A 13 year old boy has an syncopal episode whilst playing sport. There was no trauma. He is unconscious for one minute and there is no seizure activity during this time, nor evidence of a post-ictal phase.

His observations are as follows:

BP	105/70mmHg	
HR	90	/min
RR	18	/min
O ₂ saturations	99%	on room air
GCS	15	

An ECG is done and is shown on the page opposite.

SAQ 22



SAQ 22

- 1. List four (4) relevant findings on the ECG.**

SAQ 22

1. List four (4) relevant findings on the ECG.

- i. Left ventricular hypertrophy
- ii. Non-specific global ST-segment depression (?c/w LVH/ LMCA but age 15)
- iii. aVR, V1, V2 ST segment elevation (?c/w LMCA but age 15)
- iv. P-wave abnormalities (large P-waves globally/ retrograde P-wave V2)
- v. PR interval normal (i.e. no short PR)
- vi. Sinus rhythm (i.e. no arrhythmia)
- vii. Non-specific T-wave changes especially laterally (?c/w LVH)

SAQ 22

2. What is the diagnosis?

3. List two (2) of the most important complications associated with this diagnosis.

SAQ 22

2. What is the diagnosis?

Hypertrophic Cardiomyopathy

3. List two (2) of the most important complications associated with this diagnosis.

- i. Ventricular arrhythmia
- ii. Sudden death
- iii. Risk to offspring (genetic transmission)
- iv. Abnormal coronary arteries (ischaemia risk increased)

SAQ 22

4. List three (3) important management priorities during this current admission.

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- i. Telemetry/monitoring for arrhythmia*
- ii. Exclusion of valvular pathology/LVOT(echo)*
- iii. Parental counseling
- iv. Patient counseling re sport/activity
- v. Beta-blocker
- vi. Consideration for electrophysiological studies
- vii. Consideration for implantable defibrillator

SAQ 27

A 78 year old woman from a nursing home presents with generalised abdominal pain and vomiting for the past 24 hours.

Her observations are as follows:

BP	165/82	mmHg
HR	90	/min
RR	20	/min
O ₂ saturations	96%	on room air
Temperature	36.2	°C
GCS	14	(E4, V4, M6) normal for patient

An AXR is taken and shows no obstruction.

Her chest x-ray is shown below:

SAQ 27



SAQ 27

- 1. What is the presumptive diagnosis?**
- 2. List five (5) important features demonstrated on this x-ray. Include three (3) positive and two (2) negative findings.**

SAQ 27

1. What is the presumptive diagnosis?

Gastric volvulus (diaphragmatic hernia w/ obstruction)

2. List five (5) important features demonstrated on this x-ray. Include three (3) positive and two (2) negative findings.

- + Hiatus hernia
- + Multiple loops seen intrathoracic suggestive of volvulus
- + Air-fluid level seen within lower loop suggestive of obstruction
- + Some rightward mediastinal/tracheal shift suggestive of mass effect

- No gas under diaphragm
- No mediastinal gas
- No PTx

SAQ 27

3. List four (4) immediate management priorities.

4. What is the role of a nasogastric tube in this patient?

SAQ 27

3. List four (4) immediate management priorities.

- i. Ascertaining advanced care directives/NFR orders
- ii. Analgesia – Opiate with appropriate dosing, e.g. Morphine 2.5 mg IV prn
- iii. Antiemetic – Ondansetron 4-8mg IV TDS or Metoclopramide 10-20mg IV QID
- iv. IV fluids, correction of electrolytes
- v. Surgical intervention
 - accept conservative – gastroscopy
 - accept aggressive - laparotomy if comment about nursing home

4. What is the role of a nasogastric tube in this patient?

Diagnostic but not therapeutic – unable to pass

SAQ 30

A 24 year old male presents with confusion after competing in a half marathon event. His observations are as follows:

BP	95/60	mmHg
HR	118	/min
RR	24	/min
O ₂ saturations	98%	on room air
Temperature	40.8	°C
GCS	13	(V3, E4, M6)

SAQ 30

- 1. What is the most likely diagnosis?**
- 2. List four (4) important investigations for this diagnosis. Include a justification for each.**

SAQ 30

1. What is the most likely diagnosis?

Heat stroke

2. List four (4) important investigations for this diagnosis. Include a justification for each.

Total CK (rhabdomyolysis)*

Glucose (significant changes with heat stroke)

Coags (INR correlated to outcome)

VBG/ABG (electrolytes in particular + glu)

FBE (thrombocytopaenia/leukocytosis)

LFTs (significant organ dysfunction)

Urinalysis (with myoglobin)

U&Es (hyperkalaemia, renal failure)

ECG (arrhythmias)

CTB (exclude intracranial cause)

SAQ 30

3. List four (4) temperature control strategies.

SAQ 30

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- i. Remove clothing
- ii. Reduce ambient temperature (AC, lights off etc)
- iii. Cooled IV fluids
- iv. Cold misted spray / fans
- v. Ice packs to axillae / groin, etc.
- vi. Ice water bath (beware airway)
- vii. IDC cold washout

Focus on initial (sensible approach, i.e. not to start with ICC cooling!).

SAQ 30

4. List four (4) other immediate management priorities for this patient.

SAQ 30

4. List four (4) other immediate management priorities for this patient.

- i. Protect airway
 - accept open airway / lateral position / airway adjuncts
 - no need to intubate this patient but not error if choose this
- ii. Glucose management to normoglycaemia
- iii. **IV fluid resuscitation** (CSL/NS) – aggressive fluid therapy essential*
- iv. IDC insertion with UO > 2-3 ml/kg
- v. Establish NOK and communication
- vi. Early aggressive renal replacement therapy especially if ARF/UO low
- vii. ICU referral – recognition of high mortality
- viii. May require ECMO

Key messages

- Order in your head before committing to paper
- Scatter gun approach won't work
- Scores can be aggregated down to 10
- If miss essential response then may only get max of say 2/4
- Pass score determined by standard setting