

MONASH PRACTICE EXAM 2023.1 QUESTION 7

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A 14 year old girl presents to your ED following a syncopal episode.



PART ONE

List three (3) key questions to ask when taking a history from this patient, and state the relevance for each question. [6 marks]

- ♣ *any prodromal symptoms: differentiate vasovagal versus cardiac versus neuro*
- ♣ *associated activity and timing of activity in relation to the event: determine likelihood of cardiac cause*
- ♣ *any seizure-like activity including tongue biting, incontinence, post-ictal period: differentiate syncope versus seizure as different follow-up and implications*
- ♣ *relevant PMHx including previous similar episodes, medication hx, LMP/sexual activity, drug and alcohol use: recurrent episodes needing investigation, medication use or misuse, risk of ectopic pregnancy, intoxication as possible causes*
- ♣ *relevant FHx including sudden unexplained death or death at young age: risk of congenital arrhythmic cause*

ζ PART TWO

List three (3) specific signs to look for on this patient's ECG. [3 marks]

- ♣ *ischaemia*
- ♣ *arrhythmia*
- ♣ *major conduction defect*
- ♣ *ventricular pre-excitation*
- ♣ *cardiomyopathy*
- ♣ *LV strain due to aortic valve disease*
- ♣ *prolonged QTc*
- ♣ *Brugada syndrome*
- ♣ *RV dysplasia*

7 PART THREE

State three (3) indications for referral and further outpatient investigations for a child with syncope. [3 marks]

- ♣ *atypical history*
- ♣ *suspect cardiovascular cause*
- ♣ *suspect seizure or CNS cause*
- ♣ *suspect eating disorder*
- ♣ *recurrent or problematic vasovagal syncope*



EXAMPLES OF GOOD ANSWERS

Family history of sudden cardiac death	Identify likelihood of underlying hereditary cardiac conditions e.g. HOCM, brugada
History of menorrhagia	Identify possibility of anaemia as cause for syncope
History of restrictive food intake	Identify risk of eating disorder that may be associated with hypokalaemia and risk of arrhythmias as well as postural instability

EXAMPLES OF GOOD ANSWERS

1	events surrounding collapse	exertion : may related with LVOT : HOCM
2	family history of heart problems	familiar cardiomyopathies
3	patient general health prior to collapse	if patient has been sick : may give us clues regarding collapse : febrile : sepsis?



EXAMPLES OF GOOD ANSWERS

- Pre excitation e.g. short PR, delta wave
 - Evidence of sodium channelopathies e.g. coved ST elevation in V1 - V3 in Brugada
 - Evidence of structural disease e.g. dagger like inferior q waves suggesting HOCM
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- Coved ST elevation in anterior chest leads - sign of Brugada syndrome
 - Dagger shaped Q waves in inferior leads - sign of hypertrophic cardiomyopathy
 - Delta waves - sign of Wolf Parkinson White syndrome

ζ EXAMPLES OF GOOD ANSWERS

- Features of HCM: dagger Q waves
- Features of WPW: delta wave, short PR, widened QRS
- Features of Brugada syndrome: saddle back ST elevation in V1 and V2

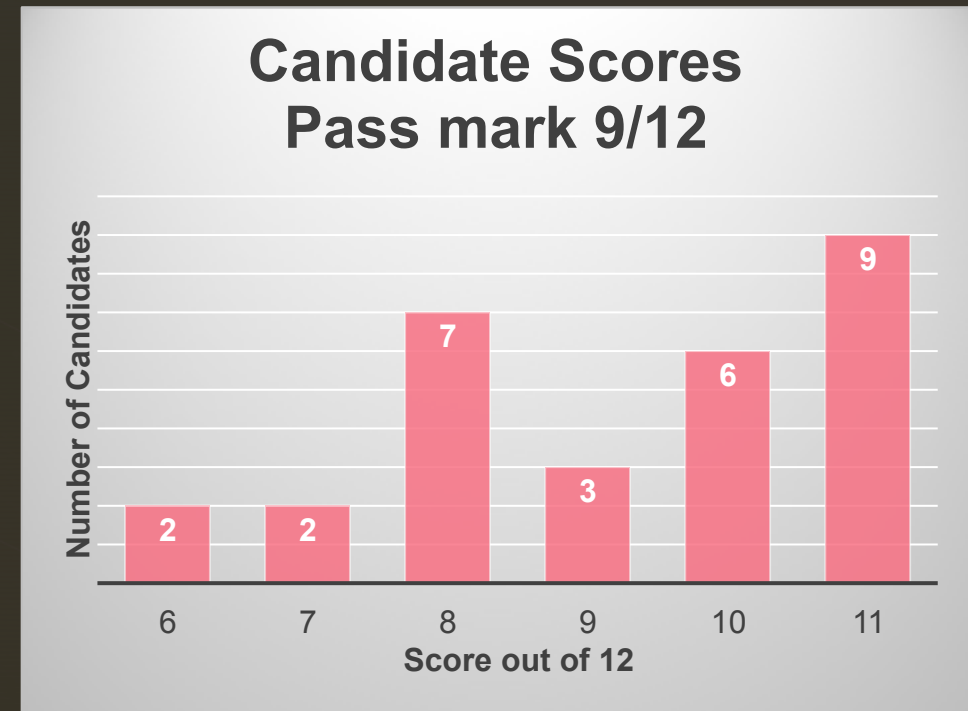


GENERAL FEEDBACK

- ♣ Get judgey! The question is about a 14 year old female on purpose. Think about what young teenage girls might be doing in their lives. Not all syncope is cardiac in nature.
- ♣ Group your answers. Listing 3 different cardiac indications for referral will not get you 3 marks, unless the question specifically asks for cardiac causes only.
- ♣ Please check spelling/autocorrects before submitting your answers
- ♣ Don't over-answer: if the question asks for 3 answers, don't write 4 answers

SOME STATS

- ♣ Average score = 9.2
- ♣ Pass mark of 9/12
= 62% of candidates passed



REFERENCES

- ♣ Dunn
- ♣ Cameron
- ♣ RCH Clinical Practice Guidelines

