Exam 23.1 Question 6.

Examiner: Michael Coman

A 36yo man presents to the ED with palpitations. He has a past history of recurrent syncope. His ECG is shown below

1. List four abnormalities seen on this ECG (4 marks)
2. Irregularly irregular
3. Wide complex tachycardia – rate 180 -200
4. Left axis deviation
5. no p waves

variable QRS morphologies – beat to beat variation

No concordance

Tachycardia alone did not receive a mark

AV dissociation incorrect – need to see p waves to determine av dissociation.

Can’t distinguish delta waves in the QRS complexes

1. List 4 clinical findings that would support your decision to proceed to urgently treat this patient (4 marks)

a. chest pain

b. confusion

c. hypotension

d. signs of heart failure

1. What is the most appropriate medication and dose for pharmacological treatment of this patient (2 marks)

This question was included to distinguish candidates who were able to determine that WPW was a possible underlying condition in this tachyarrhythmia – the beat-to-beat variation in QRS morphology suggests an underlying accessory pathway. Given this, there are some medications that are contraindicated in accessory pathway tachyarrhythmias: amiodarone/verapamil/adenosine/dig – av nodal blocking agents.

The safe answer is Flecainide.

|  |  |
| --- | --- |
| Medication | Dose |
| Flecainide | 150mg or 2mg/kg IV over 30 minutes |

Procainamide was not accepted even though it is a safe and appropriate agent to use. This is because it is not widely available. It’s not actually listed on the TGA’s register of therapeutic goods, so it’s technically not allowed to be used, and any use in Australia is off-licence. This is a practical examination, not a theoretical examination. There is no point offering up a therapy if it isn’t available to 99% of ED’s. I need to know that you know what you will give based on what is available.

Beware using the term ‘bolus’. Bolus is often perceived as an IV push of an agent or fluid. Perhaps some candidates meant ‘loading dose’. I would not use the ‘bolus’ in the exam for drugs – give a dose over a specific infusion time. (However, a 20ml/kg crystalloid ‘bolus’ in a shocked patient is entirely appropriate terminology)

1. Following a successful response to treatment, another ECG is taken below List 2 (two) significant findings on this patients ECG (2 marks)
2. Delta waves laterally
3. Short pr interval

Won’t accept sinus rhythm – implied in the stem and a med student level answer.

29 candidates

Top mark : 12

Bottom mark: 2

Median mark: 8

Pass mark: 7 (76% pass rate)

(But probably the pass mark should be 8)