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# Hong Kong College of Emergency Medicine

Joint Clinical Meeting

OSCE

Answer Key

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# Question 1

- A full term new born was delivered in the A&E.
- What are the five components of Apgar score?  
(1.5 marks)
  - ❑ Skin color
  - ❑ Pulse rate
  - ❑ Tone
  - ❑ Reflex
  - ❑ Breathing

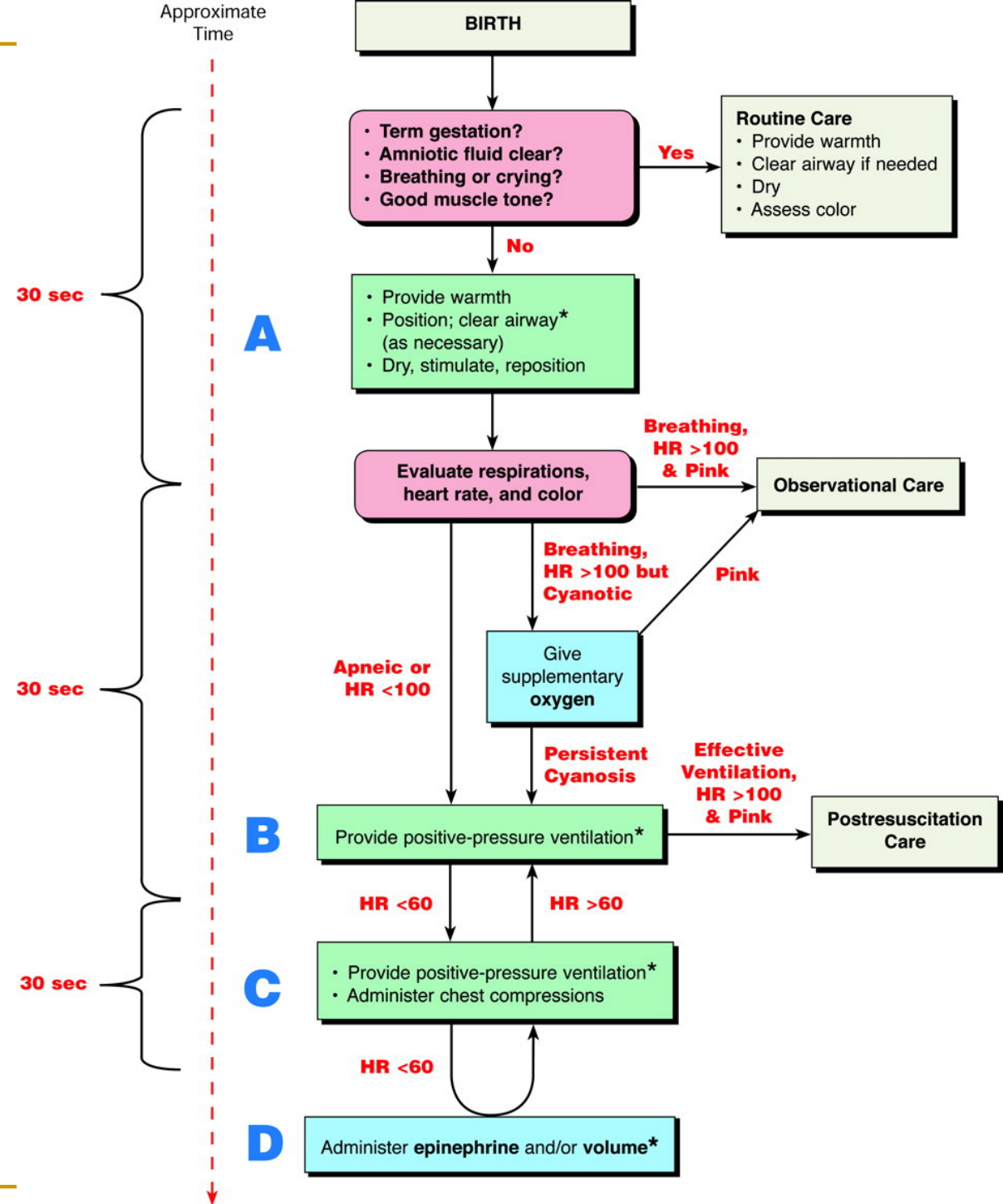
# Question 1

- Name the three important steps to resuscitate the new born at the first 30 sec. (1.5 marks)
  - ❑ Keep warm and dry
  - ❑ Clear airway
  - ❑ Stimulate the baby

# Question 1

- If the baby is breathing and the heart rate is 50/min, what is the next step of resuscitation? (1 mark)
  - ❑ Start supplementary oxygen with BVM
- If the baby does not respond to step (c), what should you do? (1 mark)
  - ❑ Start external chest compression

# AHA Neonatal Flow Algorithm



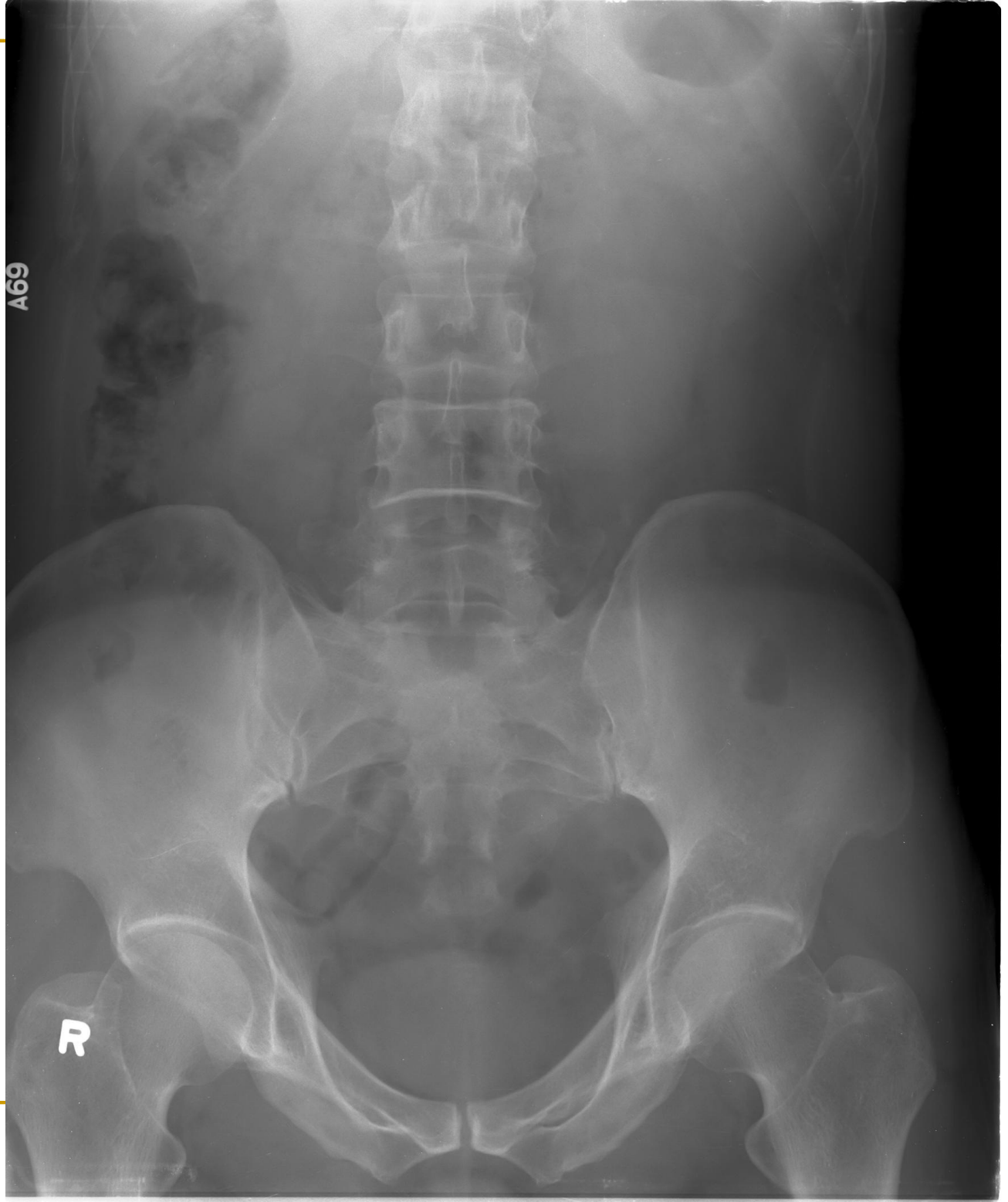
\* Endotracheal intubation may be considered at several steps

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## Question 2

- A 50 year old man presented with loin pain. On arrival, his blood pressure was 98/68mmHg and pulse was 87/min. He was afebrile. Baseline blood test was taken and showed mildly elevated WBC (11.2), normal Hb and normal liver & renal function. KUB was taken (See picture)
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## Question 2



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## Question 2

- What is the abnormality in the KUB? (1 mark)
  - A 0.8 cm curvilinear opacity is projected at the left paraspinal region at L5 level, likely to be a ureteric stone



## Question 2

- He told you that he has read something about the Medical Expulsive Therapy (MET) in internet and he asked you whether you can prescribe medication for him.
- What are the two major groups of medication that can be used for Medical Expulsive Therapy?  
(2 mark)
  - $\alpha$  - blocker
    - Terazosin and Tamsulosin
  - Calcium channel blocker
    - Nifedipine

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## Question 2

- Is he eligible for Medical Expulsive Therapy (MET) and why? (1 mark)
    - ❑ No
    - ❑ His blood pressure was not high enough
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## Question 2

- Name two contraindications for MET (1 mark)
  - ❑ Presence of UTI
  - ❑ Stone size > 10mm
  - ❑ SBP < 110mmHg
  - ❑ Abnormal RFT

# Medical Expulsion Therapy

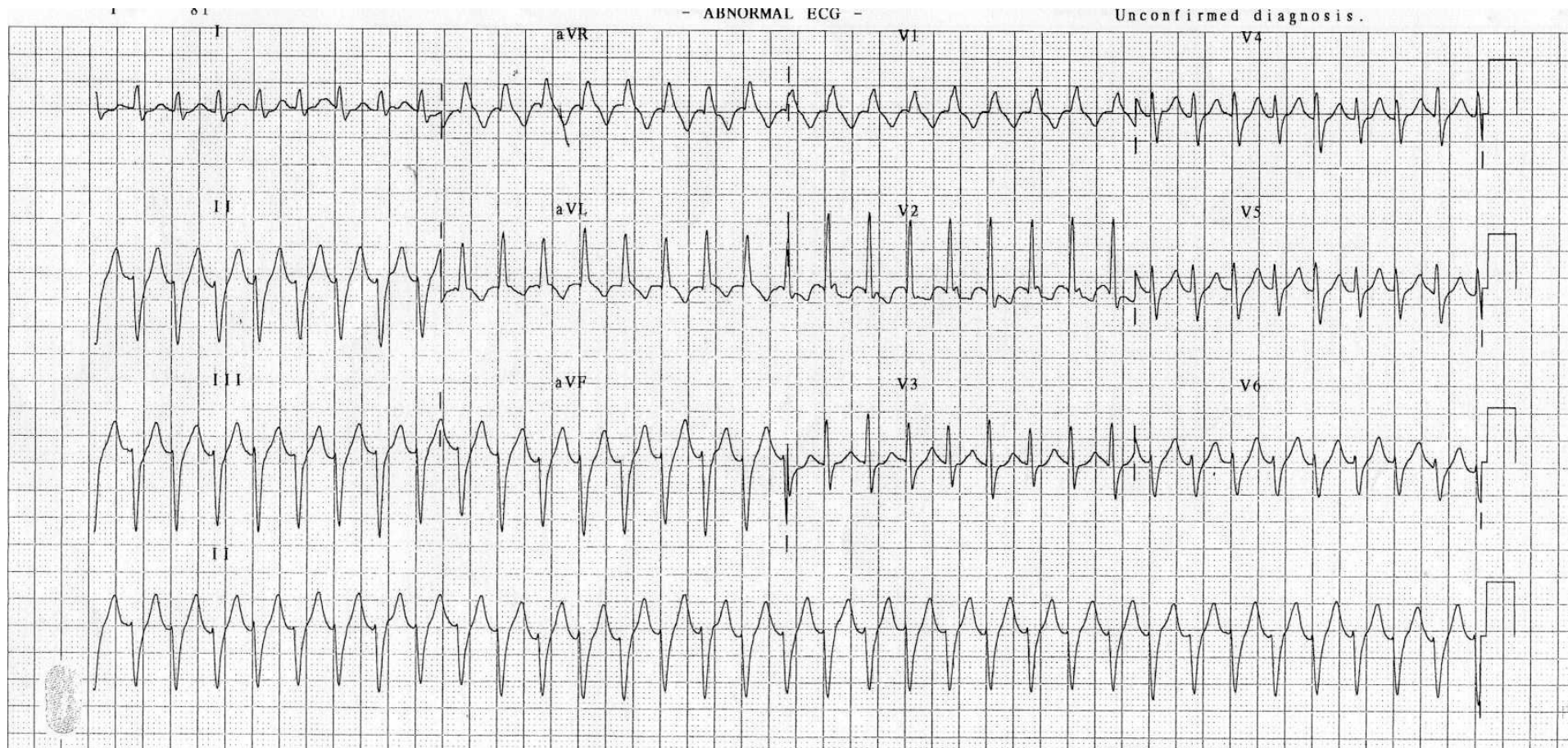
- Ureter has  $\alpha$  - adrenergic receptors and more concentrated at distal ureter
- Studies showed  $\alpha$  - blocker & CCB can reduce the time of spontaneous stone passage and pain
  - Reduce the spasm of the distal ureter
  - Relax the smooth distal to the stone

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## Question 3

- A 19 year old girl presented with palpitation. ECG was taken as follows:

# Question 3



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## Question 3

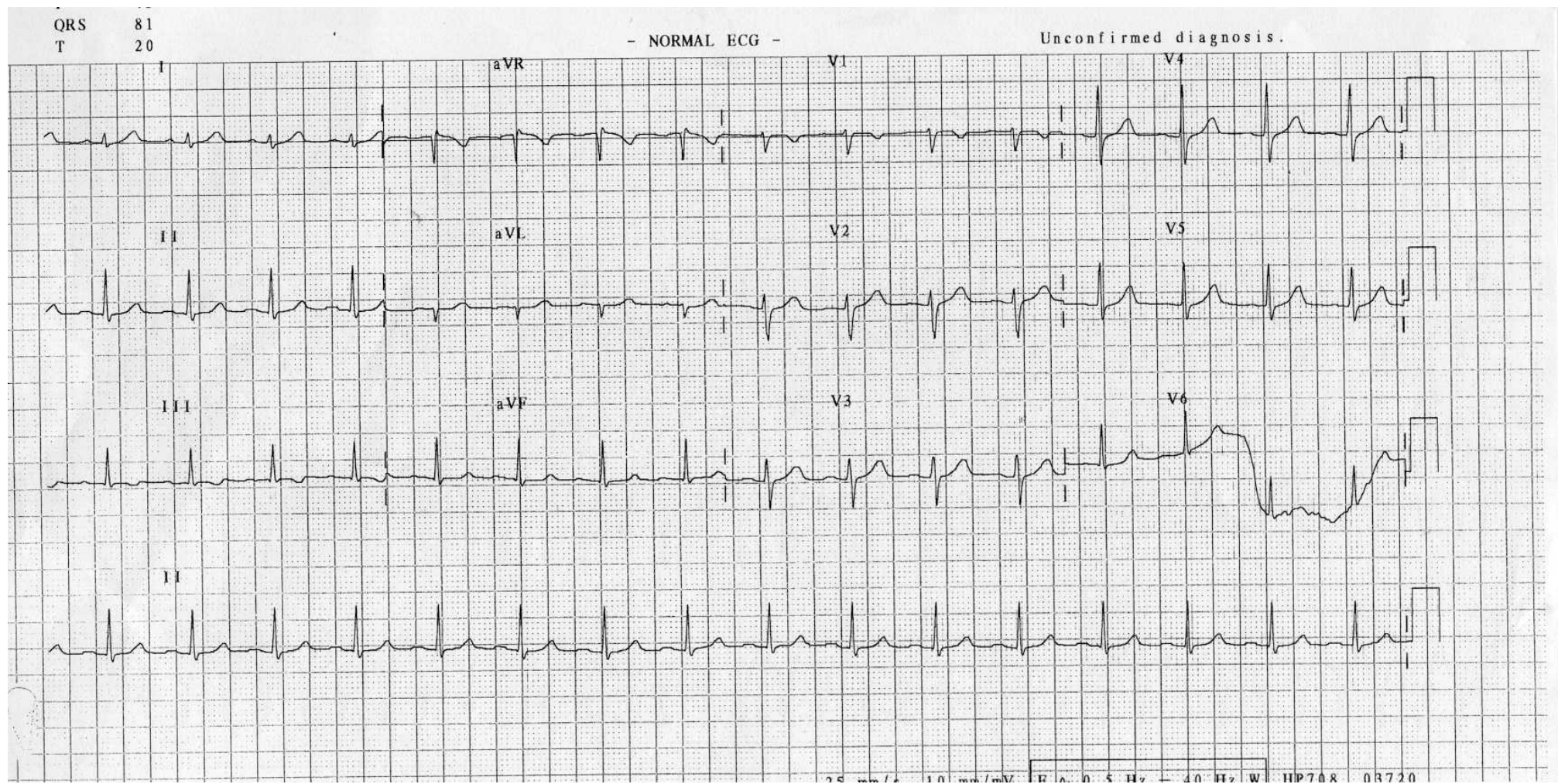
- Describe the ECG finding (2 marks)
    - ❑ No p wave
    - ❑ Wide complex tachycardia (QRS about 100msec)
    - ❑ LAD
    - ❑ RBBB pattern
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# Question 3

- ECG Diagnosis (2 marks)
    - Fascicular VT
  - Name one drug to treat this condition (1 mark)
    - Isoptin
  
  - Reference:
    - KW Lam. ECG Quiz. Hong Kong j emerg med. 2001;8(2):119-201
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# Question 3



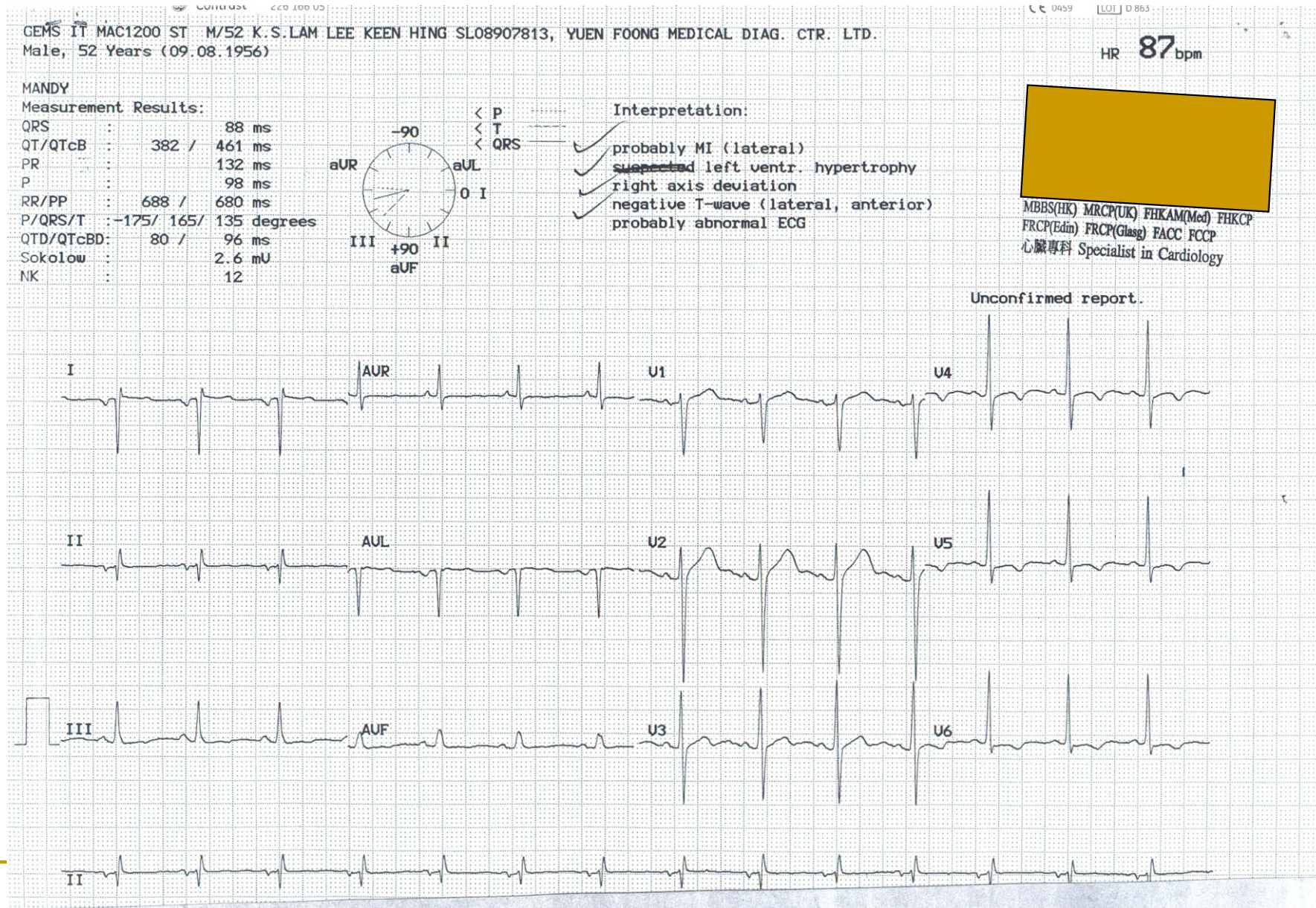
After Isoptin 5mg IVI

## Question 4

- A 52 year old man was recently noticed to have hypertension. He received investigation by private cardiologist for hypertension including baseline blood test, chest x-ray and ECG. Besides BP: 164/93mmHg, he was asymptomatic. However, he was immediately referred by the cardiologist to A&E for investigation of “Abnormal ECG, probably MI”.



## Question 4





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# Question 4

- Describe ECG finding (2 marks)
    - ❑ RAD
    - ❑ Inverted P wave in I, II, aVL
    - ❑ T wave inversion V4-V6
    - ❑ Normal R wave progression
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## Question 4

- What is the likely cause of the problem?  
(2 marks)
    - ❑ Arm lead reversal
  - What should be your immediate action?  
(1 mark)
    - ❑ Repeat ECG with correct lead connection
-

## Question 5

- You are the team physician for a expedition team of 5 trekkers to Nepal. Despite you have prescribed Diamox as prophylactic drug, all of them complained of headache and reduced appetite after the team has reached 5000m above sea level. On next day, two team members are found severely sick.
- One patient is looked a bit confused and he has vomited all night.

## Question 5

- What is the most sensitive test to test for High Altitude Cerebral Edema (HACE)?  
(1 mark)
  - Test for Ataxia
    - Tandem-gait test
    - **Not** Finger-to-nose test

## Question 5

- If you think this patient suffers from HACE, what can you offer to him if immediate descent is not possible? (1.5 marks)
  - ❑ Oxygen
  - ❑ Dexamethasone
  - ❑ Hyperbaric treatment
    - Gamow bag



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## Question 5

- The other patient is coughing heavily.

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## Question 5

- What are the differential diagnosis (1.5 marks)
    - ❑ High Altitude Pulmonary Edema
    - ❑ Respiratory tract infection
    - ❑ High Altitude Bronchitis
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## Question 5

- You are considering him to suffer from a life threatening condition and descent is waiting. Theoretically, what medication other than those you have listed in question (b) that you can consider to give this patient?

(1 mark)

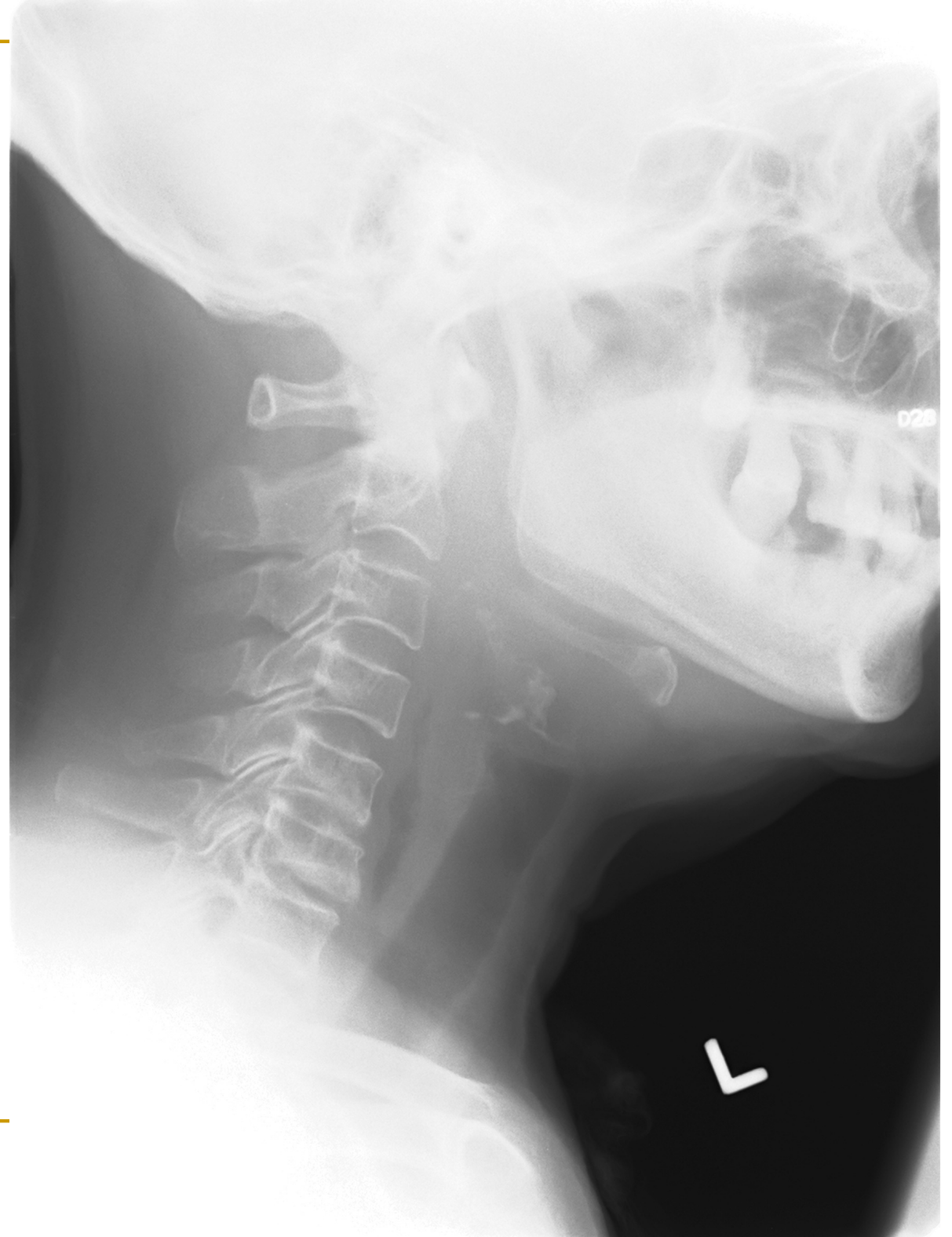
- ☐ Nifedipine
- ☐ Sildenafil / Tadalafil
- ☐ Salmeterol
- ☐ Nitric oxide

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## Question 6

- A 47 year old man presented to A&E for suspected to have swallowed a fish bone 2 days ago with persistent throat pain.
  - X-ray of neck was taken (See picture).
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# X-ray Neck



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## Question 6

- Describe X-ray finding (3 marks)
    - ❑ Elevated hyoid bone
    - ❑ Radiolucent column in the prevertebral space
    - ❑ Apparent thickening of prevertebral space
    - ❑ Epiglottis cannot be clearly visualized
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## Question 6

- What is the likely cause of the abnormality?  
(1 mark)
  - ❑ Patient on swallowing
- What is your next action? (1 mark)
  - ❑ Repeat X-ray