

Question 1 (12 marks)

A 16 year old male is referred by his GP to your emergency department with 1 month of non-productive cough and dysphagia.

A chest X-ray performed in the community is provided. **See Prop Booklet pages X and X.**

- a) Describe the major abnormality evident on this chest X-ray. (2 marks)

- b) List three (3) differential diagnoses for this chest X-ray finding. (3 marks)

1.

2.

3.

- c) Describe how you would elicit Pemberton's sign and list two (2) clinical findings it would demonstrate if positive. (3 marks)

Pemberton's Sign	
Clinical Findings	
1.	
2.	

- d) Apart from Pemberton's sign, list four (4) non-respiratory signs you would examine to assess for superior vena cava syndrome in this child. (4 marks)

1.

2.

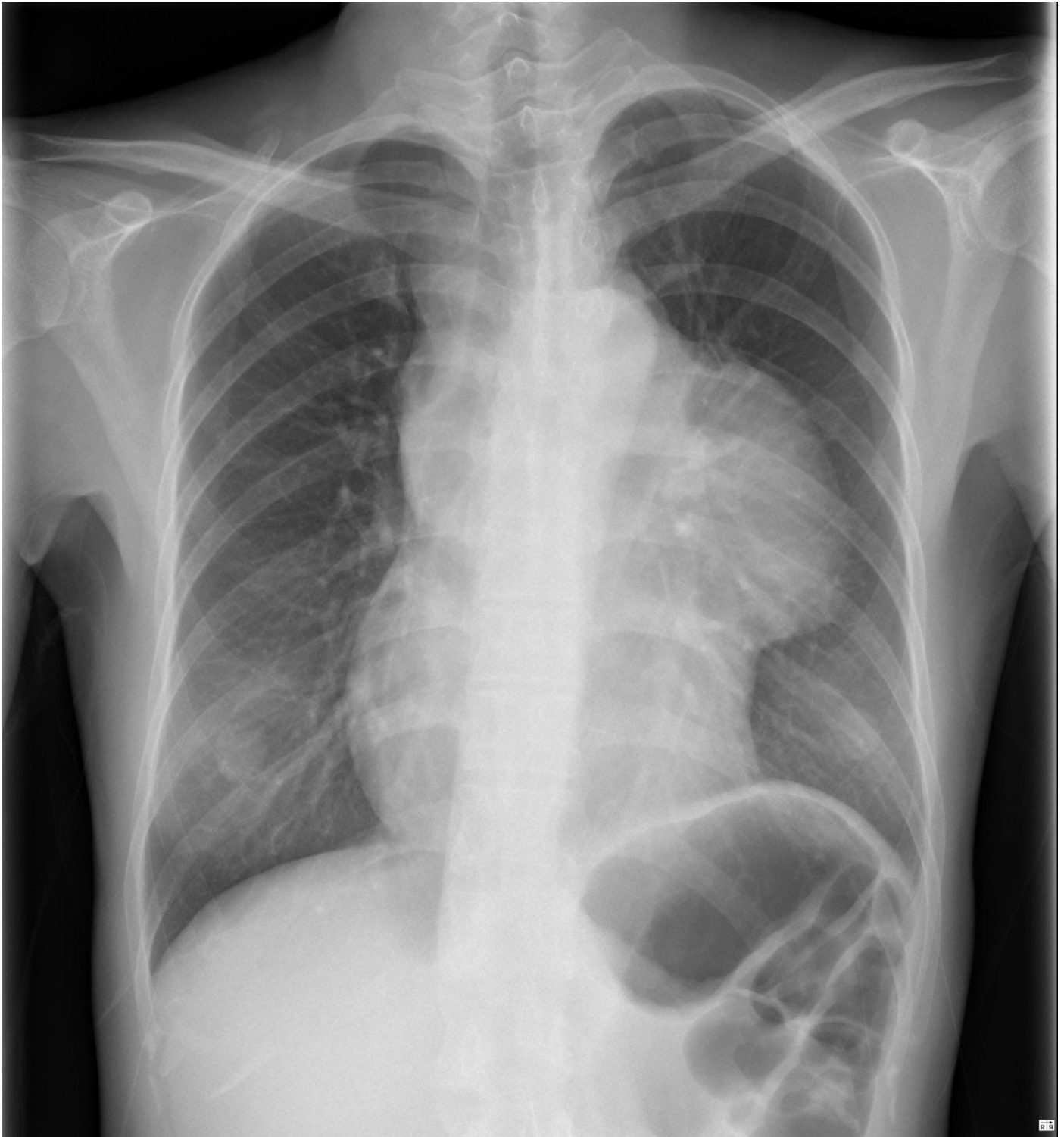
3.

4.

Prop 1



Prop 2



Question 2 (12 marks)

A 3 year old male is brought to your emergency department with 5 days of fever and a sore throat, with a new erythematous macular rash on his abdomen.

You suspect he has Kawasaki disease.

- a) Other than the fever and rash, list three (3) major diagnostic criteria on examination that must be met for a diagnosis of Kawasaki disease. (3 marks)

1.

2.

3.

- b) List two (2) infective and one (1) non-infective differential diagnoses you would also consider in this child. (3 marks)

Infective (2 marks)		Non-Infective (1 mark)	
1.		1.	
2.			

- c) For the following investigations, outline the reason for performing this test in a case of suspected Kawasaki disease. (4 marks)

Investigation	Justification (4 marks)
Echocardiogram	
Troponin	
ECG	
ESR/CRP	

- d) List two (2) medications you would give this child once Kawasaki disease is confirmed. (2 marks)

1.

2.

Question 3 (12 marks)

A 25 year old male presents to your regional emergency department (ED) with fever, sore throat and difficulty swallowing for 1 week. You consider acute tonsillitis as one of your differential diagnoses.

- a) Apart from quinsy, list two (2) local and two (2) systemic complications of acute bacterial tonsillitis in the table below. (4 marks)

Local (2 marks)	Systemic (2 marks)
1.	1.
2.	2.

- b) List three (3) examination features to differentiate quinsy (peritonsillar abscess) from acute tonsillitis. (3 marks)

1.

2.

3.

- c) You diagnose peritonsillar abscess and consider surgical drainage in the ED. Name two (2) patient-specific contraindications. (2 marks)

1.

2.

- d) List three (3) complications associated with incision and drainage of a peritonsillar abscess.
(3 marks)

1.

2.

3.

Question 4 (12 marks)

A 37 year old female presents to your emergency department with progressively worsening abdominal pain. She had gastric bypass surgery (at your facility) for morbid obesity 4 months ago and has lost 40 kg.

Her VBG is reproduced below.

		Reference Range
pH	7.48	7.35-7.45
pCO ₂	45	35-45 mmHg
pO ₂	69	60-85 mmHg
HCO ₃	33	22-28 mmol/L
NA ⁺	126	135-145 mmol/L
K ⁺	1.8	3.5-4.5 mmol/L
Cl ⁻	84	95-110 mmol/L
Glu	5.9	3.0-7.8 mmol/L

- a) State your interpretation of this VBG. (2 marks)

- b) List two (2) potential causes for this patient's VBG results. (2 marks)

1.

2.

- c) You elect to perform an abdominal CT scan with IV contrast. The radiologist suggests giving the patient a small amount of water 15 minutes prior to the scan. What is their reasoning? (2 marks)

1.

2.

Her CT scan is reported as normal, and despite the use of multi-modal analgesia her pain is increasing, and she appears increasingly unwell.

- d) List your next step in management and state your rationale. (2 marks)

Management (1 mark)	Rationale (1 mark)

- e) List four (4) late complications of gastric bypass bariatric surgery. (4 marks)

1.

2.

3.

4.