

*OSCE JCM 7 May 2014*

*A&E PWH*

*(Questions)*

**Question 1.** A middle age lady with good past health picked some mushroom near reservoir, cooked with chicken and ate them.

She developed vomiting and diarrhea afterwards. She attended the A&E ~ 12 hours after the chicken mushroom meal.

In A&E, BP: 131/62, P: 55/min, afebrile. CBC, LRFT were normal.

(1) What is the most important piece of information from history and how it could determine severity of food poisoning? (2 marks)

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(2) What is the most common presentation for wild mushroom poisoning reported in Hong Kong? (2 marks)

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(3) Name a most well-known mushroom that is fatal. (1 mark)

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The patient's relatives showed samples the patient picked resembling the following:



There was progressive deterioration of liver function ( ALT to 5132, INR to 5.58 within 2 days).

(4) What medications are probably useful? (4 marks)

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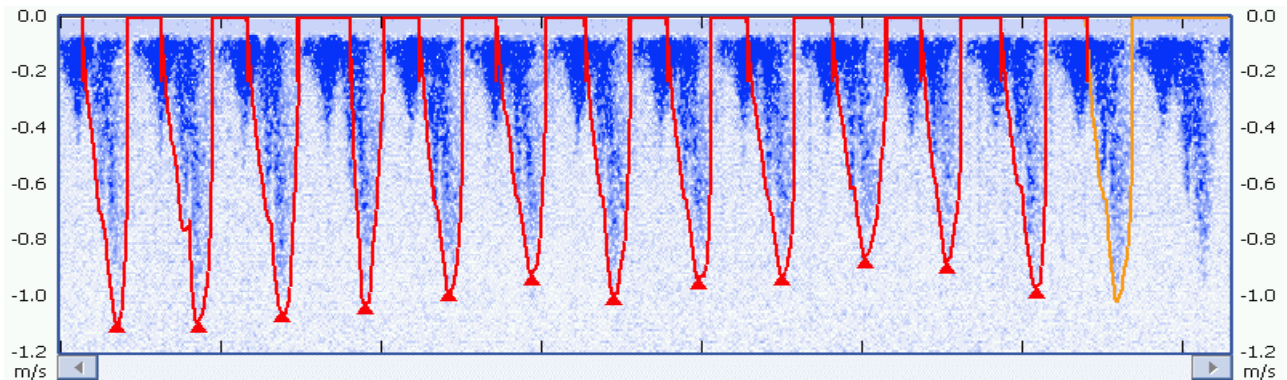
(5) What is the last resort of treatment? (1 mark)

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**Question 2.** A 70-year old man with history of DM had abdominal pain, vomiting and diarrhea for a few hours. His only medication was oral anti-diabetic drug.

BP: 91/50, P: 125/min, SpO2 96% on 3L O2, temp: 38 °C.

An investigation was performed. Results were as follows:



		V	Chg	Avg	Age specific reference range
Vpk	Velocity Peak (m/s)	0.98	0.00	1	0.7-0.9
Pmn	Mean Pressure Gradient	1.8	0.00	2	0.9-1.5
vti	Velocity Time Integral (cm)	18	0.00	19	17-22
HR	Heart Rate (bpm)	116	0.00	117	--
MD	Minute Distance (m/min)	21	0.00	22	11-15
ET%	Ejection Time Percentage (%)	54	0.00	54	--
FT	Flow Time (ms)	283	0.00	282	350-414
FTc	Flow Time Corrected (ms)	390	0.00	389	375-424
SV	Stroke Volume (cm <sup>3</sup> )	71	0.00	74	55-71
SVI	Stroke Volume Index (ml/m <sup>2</sup> )	34	0.00	36	35-46
CO	Cardiac Output (l/min)	8.2	0.00	8.6	3.5-4.8
CI	Cardiac Index (l/min/m <sup>2</sup> )	3.9	0.00	4.1	2.2-3.1
SVR	Systemic Vascular Resistance	663	0.00	642	1205-1646
SVRI	SVR Index (ds cm-5m2)	1374	0.00	1329	1876-2565
SVV	Stroke Volume Variability (%)	46	0.00	52	12-30
SW	Stroke Work (mJ)	634	0.00	661	509-700
CPO	Cardiac Power (W)	1.2	0.00	1.3	0.5-0.8
SpO2	Oxygen Saturation (%)	97	0.00	97	--
DO2	Oxygen Delivery (ml/min)	1473	0.00	1546	667-923
SVS	Stroke Volume Saturation	69	0.00	72	--
SMLI	Inotropy Index	1.211	--	--	1-1.3
DO2I	Oxygen Delivery index	711.03	--	--	430-589
Hb		97			

(1) What investigation was performed? (1 mark)

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(2) What principle does the investigation use to give results? (1 mark)

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(3) What route of measurement was used in the above and what is the landmark for that route? (2 marks)

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(4) From the investigation results, what is the hemodynamic state of the patient (with reason) and what is cause for low bp? (2 marks)

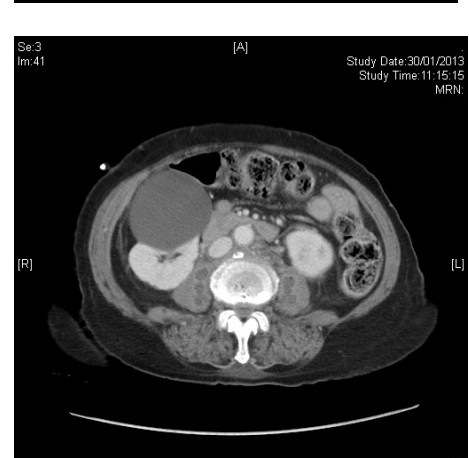
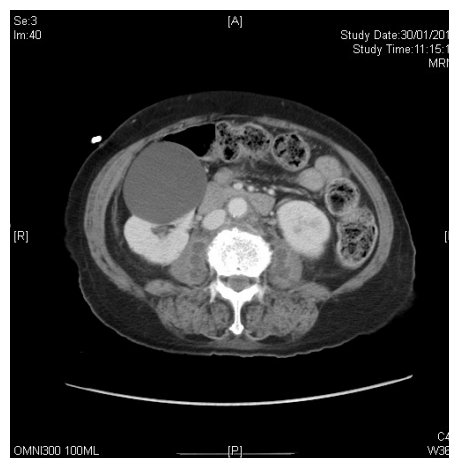
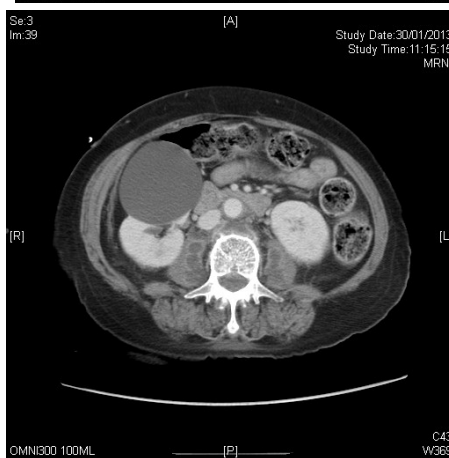
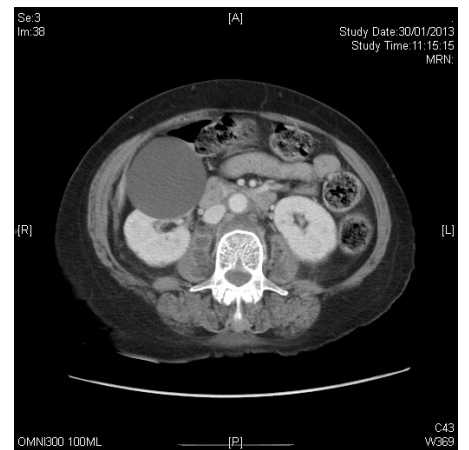
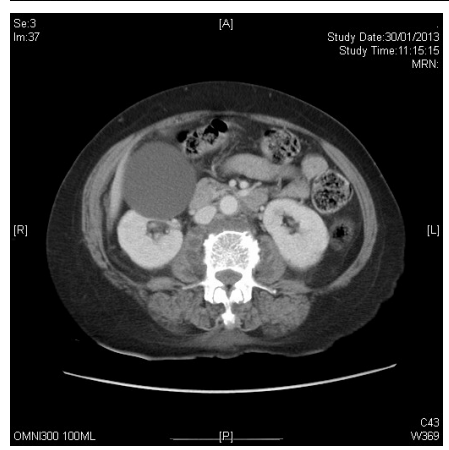
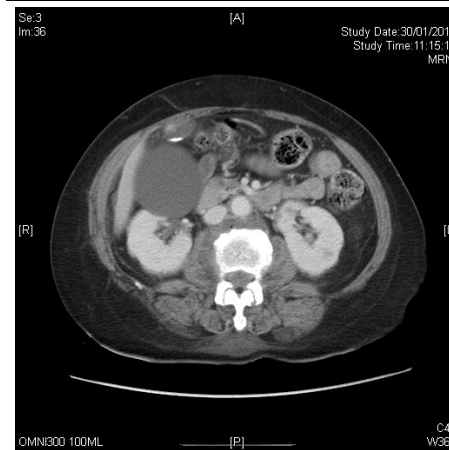
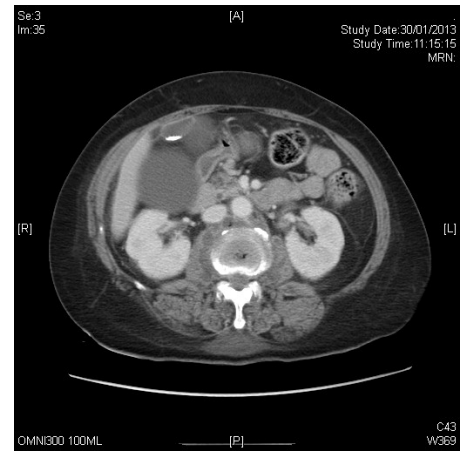
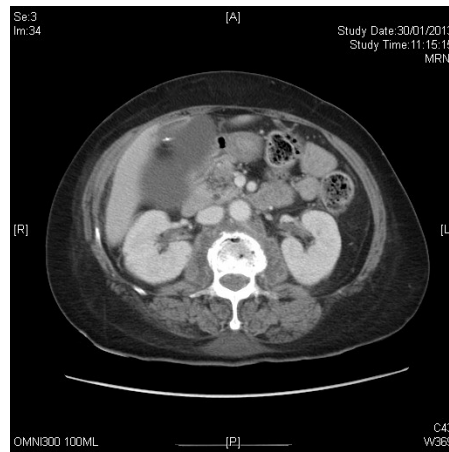
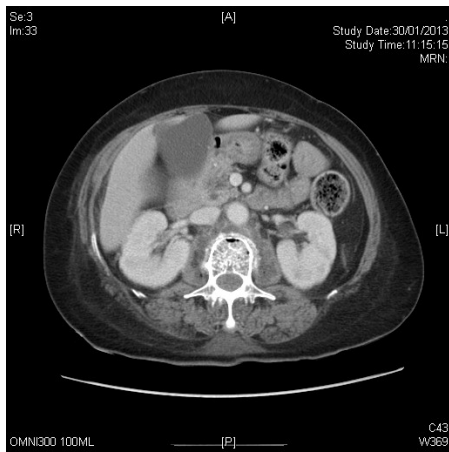
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(5) In view of the hemodynamic status, how would you manage the patient if the BP continued to drop? (4 marks)

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**Question 3.** A 68-year-old lady with history of hypertension had low back pain for a week. There was no recent injury. CBC, LRFT were normal except WCC 11.3. Xray LS spine showed mild degenerative change only.

She was admitted to EMW. She had poor oral intake. Developed low grade fever. Urine WBC +++ve. Urine nitrate -ve. Repeated blood tests raised ALP, GGT, bilirubin, and WCC. CT abdomen and pelvis with contrast was performed 9 days later:



(1) What are the abnormal findings in CT? (3 marks)

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- \_\_\_\_\_
- \_\_\_\_\_

(2) What is/ are the diagnosis? (2 marks)

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- \_\_\_\_\_

(3) What physical test regarding limb movement may show positive sign, and how to perform the test? (2 marks)

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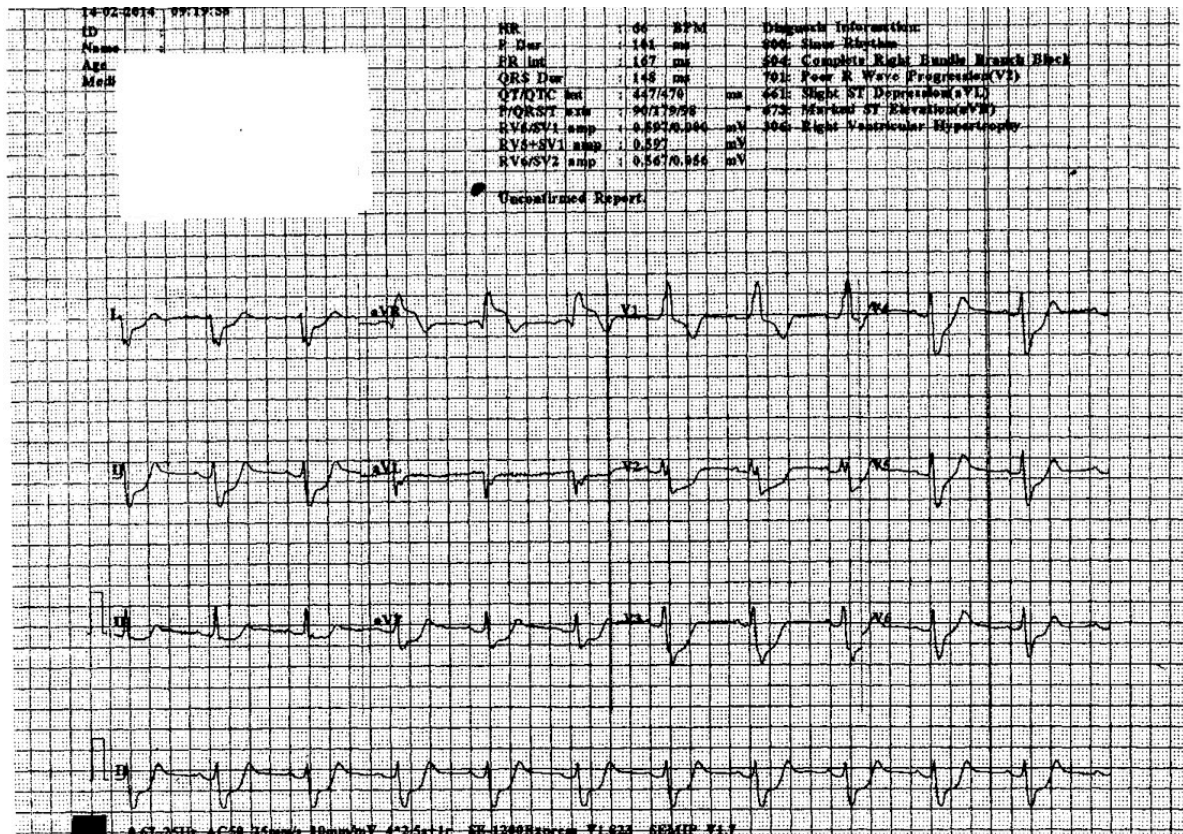
(4) What are the recommended treatments? (3 marks)

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**Question 4.** A 77-year-old man with history of CVA and subdural hematoma attended the A&E for dizziness and chest pain lasting for 3 hours after biking. He fell with head injury and forehead laceration. He had an episode of sweating.

BP: 70/40, recheck 95/55, P: 83, SpO2: 98% RA. GCS 15/15.

ECG was performed:



(1) List the most salient ECG abnormalities. (2 marks)

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(2) For the ECG, list 1 non-cardiac and 3 cardiac differential diagnosis. (4 marks)

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(3) What else can the ECG do to differentiate the cause? (1 mark)

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(4) Concerning the clinical picture, what are the specific treatments? (3 marks)

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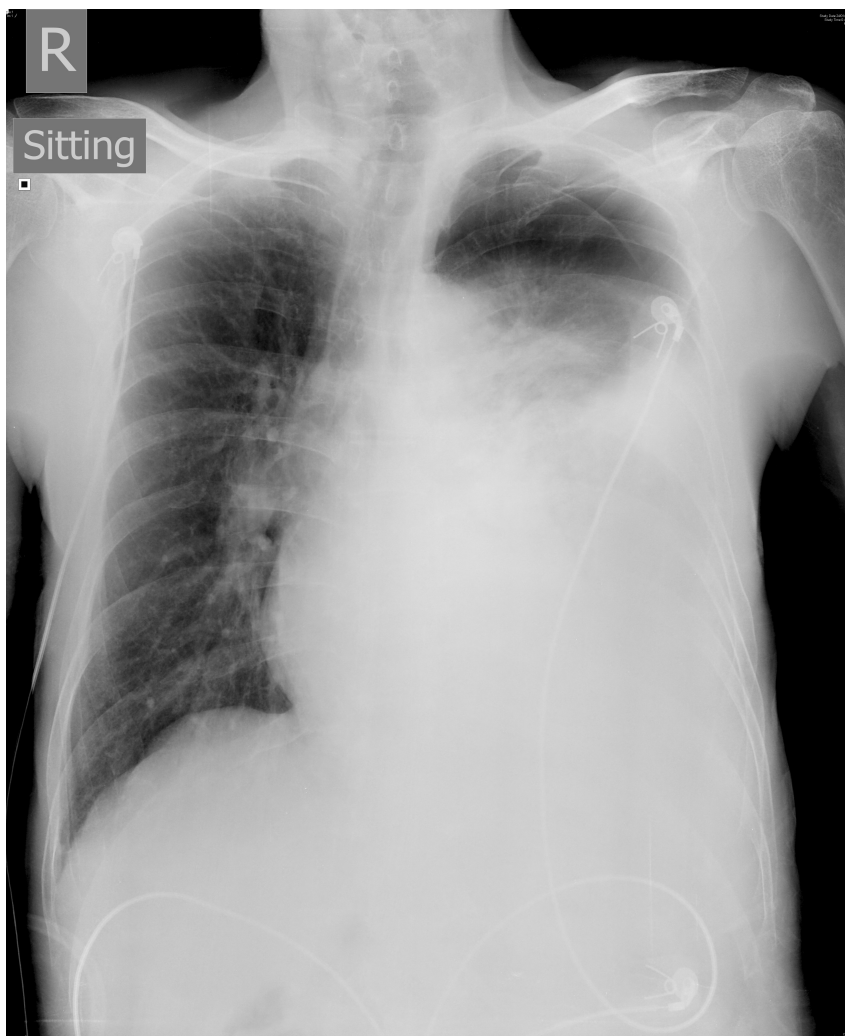
**Question 5.** A 62-year-old man previously well man complained of severe epigastric pain of sudden onset for an hour after an episode of vomiting. There was no trauma history.

BP: 96/61, P: 70/min

There was severe epigastric tenderness.

ABG: type 1 respiratory failure. ECG: normal. FAST scan: no intraperitoneal free fluid.

Chest radiograph was performed:



(1) List the CXR abnormalities. (3 marks)

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- \_\_\_\_\_

(2) What procedure will you perform? (1 mark)

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(3) If in the above procedure, you see food bolus coming out, what will be your provisional diagnosis provided the procedure was performed correctly? (1 mark)

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(4) What is the mechanism for the disease? (1 mark)

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(5) Name one confirmatory investigation for the provisional diagnosis. (1 mark)

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(6) What are the managements provided the diagnosis is confirmed? (3 marks)

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**Question 6.** A 83-year-old lady with history of lung cancer and hypertension attended the A&E for shortness of breath for a week, with increasing severity. BP: 75/40, P: 123/min. Afebrile. CXR showed right middle zone opacity. There was no consolidation. ECG showed AF with RBBB. An investigation was performed:

### <Video>

(1) What view was it? (1 mark)

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(2) What abnormalities were shown and what are the respective mechanisms? (4 marks)

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- \_\_\_\_\_  
- \_\_\_\_\_  
- \_\_\_\_\_

(3) What is the provisional diagnosis? (2 mark)

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(4) What other features may be present in the above diagnosis with the performed investigation in the video? (2 marks)

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(5) What specific therapy is required for the above patient? (1 mark)

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