

Expected answers are included (in red) to give an indication of the length of responses required

SAQ - Question 1

The following serology results are from a patient attending the antenatal clinic. The request form states that she is 12 weeks pregnant but there are no other clinical details.

Name of Test	Result
Enzyme Immunoassay (EIA) Total antibody	Positive
EIA: IgM	Negative
Treponema Pallidum Particle Agglutination Test (TPPA)	Positive (>1:1280)
Rapid Plasma Reagin (RPR)	Negative

1. How would you report these results?

Consistent with treponemal infection at some time. Advise a repeat specimen to confirm.

2 marks

2. The midwife calls you to say that the patient and her partner were treated for syphilis 3 years ago with IM benzathine penicillin. She wants to know

- a) if the mother requires further treatment – provide justification for your answer

If there was adequate treatment previously then no further treatment is necessary

1mark

- b) how to investigate and treat the baby

There is no need for the baby to undergo tests for syphilis or have treatment

2 marks

Total: 5 marks

SAQ - Question 2

An Egyptian man presented with abdominal pain, nausea and loss of appetite. There was no other history except that he grew up in a farm in his native Egypt and his family kept livestock and a number of pets including cats, dogs and chickens.

His blood test results are presented below:

TEST	RESULT	UNITS	REFERENCE RANGE
Haemoglobin	135	g/L	130 - 170
White Cell Count	10.0	X 10 ⁹ /L	4 – 11
Neutrophils	10.3	X 10 ⁹ /L	1.7 – 8.0
Eosinophils	1.0	X 10 ⁹ /L	0.0 – 0.4
Lymphocytes	1.4	X 10 ⁹ /L	1.2 – 3.6
C-Reactive Protein	25	mg/L	0 – 10
ESR	60	mm/hour	0-10
Bilirubin (total)	17	umol/L	0 - 20
Alkaline phosphatase	220	IU/L	40 - 129
Alanine transaminase	70	IU/L	10 - 50
Albumin	48	g/L	34 - 50

Abdominal ultrasound showed an enlarged liver with a single, multi-loculated cystic lesion, appearances of the gall bladder and biliary tree were normal.

1. What is the most likely diagnosis

Hydatid cyst 1 mark

2. What is the name of the pathogen implicated

Echinococcus granulosus **2 marks**

3. How did the patient acquire this infection

Dog 1 mark

4. What laboratory test is used to confirm the diagnosis

Serology 1 mark

5. What is the drug of choice to treat this infection

Albendazole 1 mark

6. What other treatment options would you consider

1. Puncture Aspiration Injection Reaspiration (PAIR) technique
2. Surgical excision

2 marks

7. Name two complications associated with the infection

Rupture

Anaphylactic shock

Disseminated Disease

Recurrence after surgery

2 marks

10 marks