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FRCPath Part 2 Haematology
Sample Questions

Morphology Short Answer Question

You are provided with a Quality Assurance Report from a NEQAS exercise on a laboratory's automated cell counter.

Briefly interpret the results.

What action is required?

Morphology Long Case

A 51 year old farmer develops a flu-like illness and a routine FBC shows a Hb of 12.0 g/dl, a WBC of 14.0 x 10^9/l and a lymphocyte count of 6.5 x 10^9/l. Six weeks later, the flu-like symptoms have improved but the FBC is unchanged.

   a) You are provided with a blood film (1A). Report the film.

The patient remains well for 7 years and is then referred with night sweats and splenomegaly.

   b) You are provided with a bone marrow aspirate (1C) and a trephine biopsy (1D). Report the aspirate and the trephine. Recommend 2 further investigations. Provide an initial management plan.

The patient is now refractory to initial therapy.

   c) You are provided with a blood film (1D), an immunophenotype report (1E) and a karyotype (1F).

   d) Report the blood film. Report the immunophenotype and karyotype. What 2 further investigations do you require? Outline the therapeutic measures you recommend.

Transfusion Medicine

A 50 year old group A RhD positive man with acute myeloblastic leukaemia is receiving consolidation therapy. He has had febrile neutropenia unresponsive to first-line antibiotics for 48 hours and has had poor platelet increments for five days. During this period his platelet count has remained below 10×10^9/l.

a)   List the three most likely causes of the poor response to platelet transfusion in this patient?

b)   What immediate steps would you take to investigate this patient?

c)   The patient develops severe epistaxis. How would you manage the immediate platelet supportive care?

Coagulation

A 44 year old man with congenital heart disease has been anticoagulated with Warfarin following a cerebral infarct. His General Practitioner is concerned about his management and feels that he may have had a further stroke. He has obtained the following results:

WBC 7.6 x 10^9/l; Hb 21.2 g/dl; Hct 0.76; Plt 188 x 10^9/l.

PT 38 s (9-11); APTT 85 s (26-36) Fibrinogen 3.12 g/l (1.8-3.6); INR 3.7

a)   Explain the results in the context of the clinical case.

b)   What further coagulation tests would you undertake to confirm your interpretation of the situation?

c)   What further management of this patient do you recommend?

Viva Questions

Field: Haematological disorders in pregnancy
Topic: Thrombocytopenia in pregnancy.

Introductory Question
What are the causes of a platelet count of 100 in a pregnant woman at 37 weeks?

- This question sets the topic on which questions will be asked
- It should be simple or factual: well below the level of competency
- It is important that the candidate answers this successfully to settle him/her for the competence question to follow

Default Question 1
Is gestational thrombocytopaenia a frequent cause of platelets of 100 in pregnancy?

- used if the candidate does not understand or cannot answer the first core question
- should be an even simpler question which may be a 'closed question' requiring a yes or no answer

The candidate must answer this phase successfully to achieve a pass mark.

Near-Competence Question
What is the significance of a platelet count of 40 in a pregnant woman at 37 weeks?

- not used if time is short, the examiner may move directly to the Competence Question
- brings the candidate close to competence
- more complex; just below competence
- a problem solving question

Default Question 2

What level of thrombocytopenia would you regard as significant in a woman at 37 weeks gestation and what are the possible consequences?

- for the nervous candidate to lead him/her towards the final question

If used, the candidate <u>must</u> answer this second phase successfully to pass.

Competence Question

A GP informs you that he has a patient at 37 weeks with a platelet count of 40 who is scheduled for home delivery, what further investigation and management do you recommend?

- candidates must *safely* manage this problem to be 'competent'