Higher Specialist Diploma

Cytopathology

Examination 2018

Paper 3

Discipline-specific questions

120 minutes

Attempt 3 out of 6 questions

Instructions to candidates

1. Record your candidate number, qualification title and where appropriate the discipline and examination paper number on the front sheet of the answer booklet
2. Record your candidate number and the page number in the spaces provided on the answer sheets
3. Begin each new answer on a new page
4. Write on one side of the answer sheet only
5. Each question is worth 100 marks
1. Discuss the value of endobronchial ultrasound-guided and transbronchial needle aspiration (EBUS TBNA) in respiratory diseases.

2. Discuss your opinion of the view held by some urologists that urinary cytopathology has little or no clinical value.

3. Evaluate the use of immunocytochemistry and molecular techniques as an aid in reporting of non-gynae samples.

4. Critically appraise the impact and benefits of primary cervical screening using HPV detection on the cervical screening programme in UK.

5. Discuss the role of cytology in the identification of infections.

6. Discuss the advantages and disadvantages of implementing strict sample acceptance criteria within a cervical screening programme.
Higher Specialist Diploma

Cytopathology

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Paper 4

Case studies

120 minutes

Attempt all case studies

Instructions to candidates

1. Record your candidate number, qualification title and where appropriate the discipline and examination paper number on the front sheet of the answer booklet
2. Record your candidate number and the page number in the spaces provided on the answer sheets
3. Begin each new answer on a new page
4. Write on one side of the answer sheet only
5. Each case study is worth 100 marks
1. A 55-year-old female attended her GP for a routine cervical smear. Figure 1 shows typical cells throughout this sample. Based on the cytology report, she was referred for colposcopic examination. Colposcopic examination was satisfactory and suggested CIN. Punch biopsies were taken from three, seven and 10 o’clock. The punch biopsies were reported as negative.

a. Study Figure 1 below and write a comprehensive report based on the morphology demonstrated in the cervical smear. (30 marks)

Figure 1

b. Discuss appropriate follow up of the patient in view of the negative punch biopsy and colposcopic findings. (30 marks)

A loop biopsy was performed which showed sheets of small carcinoma cells arranged in Indian file which were positive for CK7 and ER but negative for CK20, vimentin, CEA, WT1 and TTF1. The findings suggested metastatic carcinoma to the cervix.

The patient developed a pleural effusion which was tapped and 20mL of pale straw-coloured fluid was sent for cytological examination (Figure 2).
c. Study Figure 2 and report on the morphology demonstrated. Based on the information provided by the cervical smear, loop biopsy report and pleural fluid, provide a detailed discussion of the results and suggest a final diagnosis for discussion at the MDT meeting. (40 marks)

Unseen Case Studies

2. A 59 year old female attends an A/E department complaining of shortness of breath. She is found to have a left sided pleural effusion. A highly blood stained fluid is tapped and sent for cytological and microbiological analysis. No further clinical information is available on the submitted form. Typical cells from the fluid can be seen below:
a. Briefly describe methods in preparing blood stained serous effusions. (10 marks)

b. Describe the cytomorphology of the cells in the photomicrographs above. (20 marks)

c. What are the possible differential diagnoses? (Fully qualify your answer). (20 marks)

d. Describe how you can confirm the origin of these cells? (40 marks)

e. What further investigation would you suggest to the clinician? (10 marks)
3. A 28 year old woman attends for her first cervical smear. Figures 1 and 2 show typical cells found in the sample.

**Figure 1**

![Image 1](image1.png)

**Figure 2**

![Image 2](image2.png)

a. Describe the cytological features seen in Figures 1 and 2. Write a clinical report to include management recommendations. (30 marks)

b. A colposcopic biopsy shows an invasive squamous carcinoma. Discuss treatment options. (50 marks)

c. Discuss how this woman should be followed up after her treatment. (20 marks)