

# **Higher Specialist Diploma**

# Cytopathology

### **Examination - September 2021**

**Short-answer questions** 

60 minutes

# Attempt all four questions

#### Instructions to candidates

- 1. Record your candidate number and HSD discipline on the front sheet of the answer booklet
- 2. Record your candidate number, the question number and the page number in the spaces provided on the answer sheets
- 3. Begin each new answer on a new page
- 4. Each question is worth 25 marks

1.	You have been given responsibility to develop performance quality indicators that can be used within your cervical cytology department.  Outline the indicators that you would use and identify their strengths and weaknesses as an indicator.
2.	You have been asked to put forward a paper to your management team that describes the cases that should be discussed at cytology / colposcopy MDTs.  Describe with reasons the cases that you feel should be discussed at such meetings.
3.	A colleague has stated that they are uncertain as to what iatrogenic features might be seen in cervical cytology samples.  Describe which such features in appear in these samples.
4.	You have been asked to do a presentation to colleagues on the common pitfalls they may encounter in the interpretation of malignant cells in urinary tract samples. Explain what pitfalls you would include in such a presentation.



# **Higher Specialist Diploma**

# Cytopathology

### **Examination – September 2021**

#### **ESSAY PAPER**

120 minutes

### Attempt 2 out of 5 questions

#### <u>Instructions to candidates</u>

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- 2. Record your candidate number, the question number and the page number in the spaces provided on the answer sheets
- 3. Begin each new answer on a new page
- 4. Each question is worth 100 marks

1.	Critically appraise the impact and benefits of primary cervical screening using HPV detection on the cervical screening programme in UK.
2.	Discuss the value of endobronchial ultrasound-guided and transbronchial needle aspiration (EBUS TBNA) in respiratory diseases.
3.	Describe the main causes of false negative reporting, systems for detection of false negative reporting and methods which may prevent or reduce their occurrence.
4.	You are attending the colposcopy MDM. One of the cases is of a cervical cytology sample which was reported as high grade squamous dyskaryosis and has subsequently had a normal colposcopically directed cervical biopsy.  Consider the possible reasons for this and describe the options available to the clinicians in view of the findings.
5.	Discuss the advantages and disadvantages of implementing strict sample acceptance criteria within a cervical screening programme.



## **Higher Specialist Diploma**

## Cytopathology

#### **Examination – September 2021**

Case studies

120 minutes

#### Attempt all case studies

#### <u>Instructions to candidates</u>

- 1. Record your candidate number and HSD discipline on the front sheet of the answer booklet
- 2. Record your candidate number, the question number and the page number in the spaces provided on the answer sheets
- 3. Begin each new answer on a new page
- 4. Each question is worth 100 marks
- 5. For these case study questions you are strongly advised to answer the questions as they arise during the case study to avoid later information impacting adversely on your answers to the earlier questions by presuming an "outcome".

#### **SEEN CASE STUDY**

- 1.

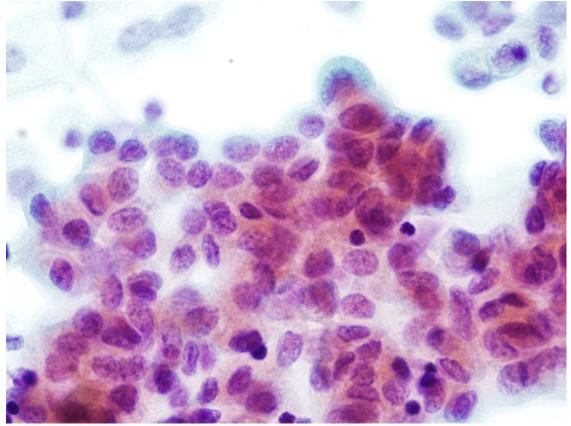
  A 60-year-old male presented with multiple episodes of haematuria and attended his GP for advice. He was referred urgently to the urology clinic. The patient was assessed with cystoscopy which showed inflammation only. Urine cytology taken before the cystoscopy showed presence of scanty "atypical cell clusters" He had imaging studies (CT IVU) which showed a filling defect in the left ureter.
- a. What do you understand by the term "filling defect"? What are possible differential diagnosis? (20 marks)

The urologist carried out selective urothelial washings from the left and the right ureter.

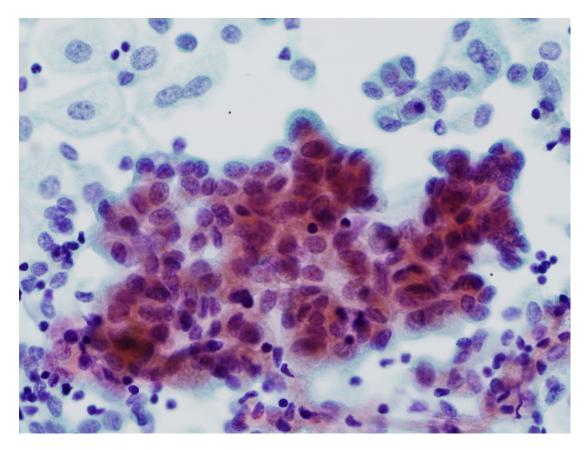
b. Briefly describe how ureteric washings are taken.

(10 marks)

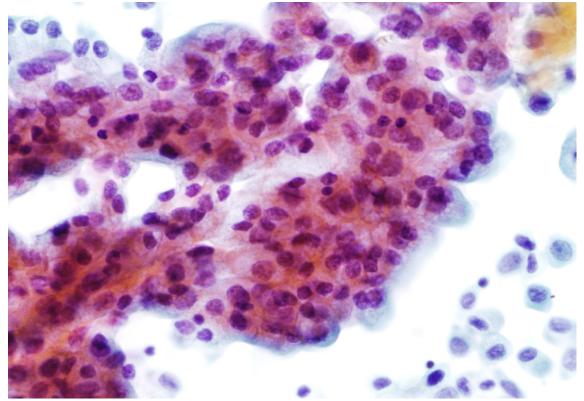
The samples were sent to cytology laboratory and cytospin preparations were made. Images 1 and 2 are from the left ureter and images 3 and 4 from the right.



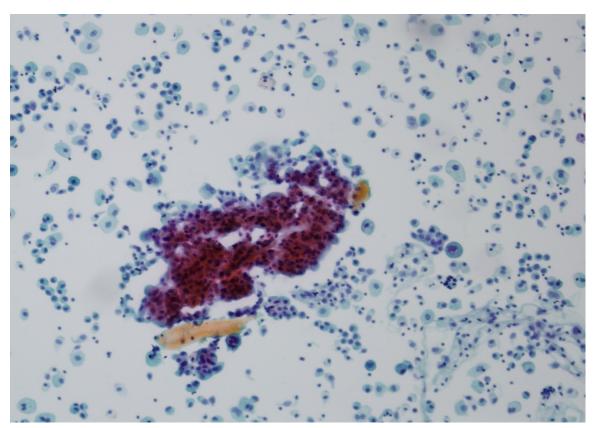
**IMAGE 1** 



**IMAGE 2** 



**IMAGE 3** 



**IMAGE 4** 

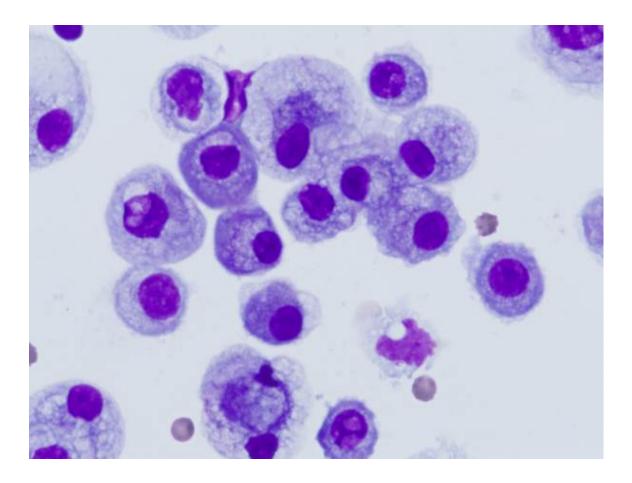
- c. Review the images and describe and discuss the cytological features, and suggest a diagnosis. (40 marks)
- d. Discuss the term iatrogenic changes and how does sample type in urine cytology affects cellular presentation. (30 marks)

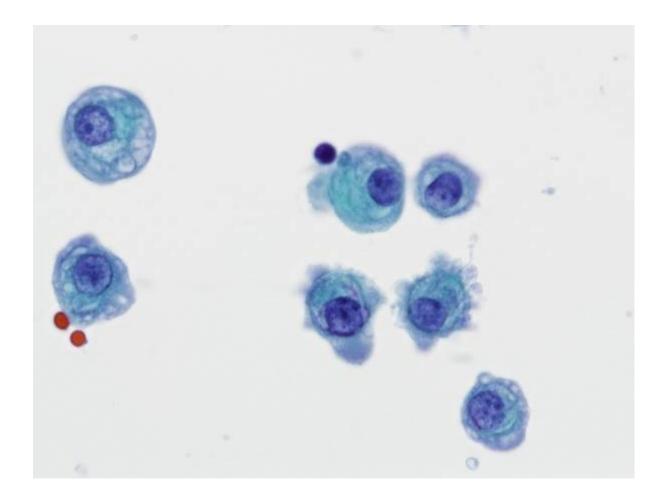
#### **Unseen Case Studies**

2.

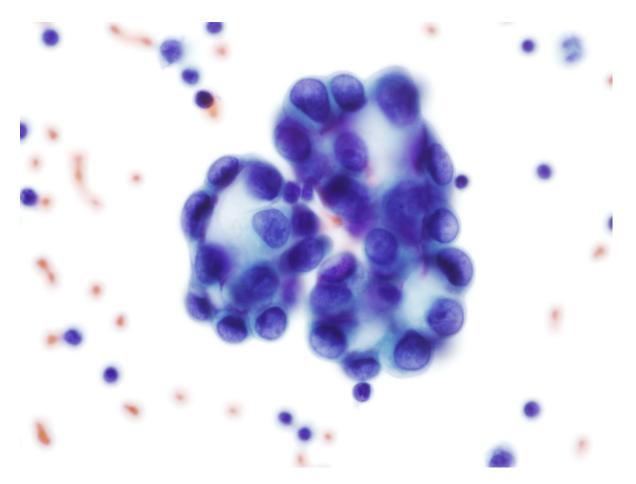
A 55 year old male presented with shortness of breath. Chest X-ray showed a large pleural effusion which was tapped and sent for cytological analysis. CT examination was subsequently carried out but did not show any abnormality in the thorax or the abdomen.

Write a detailed answer on what steps you would take to ascertain the nature of the cells shown in the photo micrographs. Your answer must include a detailed description of the cells (20marks), use of ancillary testing (40 marks) and consideration of differential diagnosis. (40 marks)





3. A man of 66 presents with shortness of breath, a persistent cough and some right-sided chest pain. X-ray shows a right sided pleural effusion and CT indicates a right sided lung mass with a focal peripheral pattern. He is an ex-smoker with stated history of 10 pack years. A sample is taken from the effusion which is diagnosed as malignant.



Describe what steps can be taken to try and identify the site of origin of the malignant cells. (100 marks)