



# **THE ROYAL COLLEGE OF PATHOLOGISTS**

## **Diploma Examination**

**Tuesday 20 September 2005**

## **CYTOPATHOLOGY**

### **First Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed - THREE HOURS***

1. “An effective HPV vaccine may eliminate cervical carcinoma”. What implications are there for cervical screening programmes after the vaccine is introduced?
2. Urine cytology is a specific but not very sensitive test for urothelial neoplasia. How may the sensitivity be improved?
3. Describe the appropriate staffing structure for a cytopathology laboratory delivering a comprehensive service, including cervical screening. What are the roles and responsibilities of each grade of staff?
4. How would you establish a cytopathologist-aspirated fine needle aspiration service?

**Please turn over for Question 5**

5. You discover that a woman with a history of negative cervical smears reported by your laboratory has developed cervical carcinoma. What are the possible consequences and what actions or investigations would be appropriate?



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## **Diploma Examination**

**Tuesday 20 September 2005**

## **CYTOPATHOLOGY**

### **Second Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed - THREE HOURS***

1. What cytopathological features may help in the differential diagnosis of salivary gland neoplasms?
2. What are the cytological features of malignant mesothelioma in a serous fluid sample? What special techniques would you use to confirm the diagnosis?
3. “Cervical cytology is of limited use in the diagnosis of adenocarcinoma”. Discuss.
4. Describe the role of fine needle aspiration cytology in lymphoma diagnosis.
5. “Fine needle aspiration cytology has no role in the management of breast disease”. Discuss.



# **THE ROYAL COLLEGE OF PATHOLOGISTS**

## **Diploma Examination**

### **DIPLOMA IN CYTOPATHOLOGY**

**Tuesday 16 March 2004**

#### **First Paper**

**Candidates must answer FOUR questions ONLY**

**Time allowed – THREE HOURS**

1. How may testing for HPV be used in a cervical screening programme? Describe possible models, their advantages and limitations, and how these models may be evaluated.
2. What issues arise in reporting cervical cytology from women under 25? Discuss the evidence for and against screening this population.
3. Describe the difficulties in using immunocytochemistry in cytology. How does immunocytochemistry contribute to accurate diagnosis in cytology specimens?
4. What implications does conversion from direct smears to liquid based cytology have for quality assurance of a cervical screening programme?
5. In which cytology specimens may psammoma bodies be found? What is their significance?



**THE ROYAL COLLEGE OF PATHOLOGISTS**

**Diploma Examination**

**DIPLOMA IN CYTOPATHOLOGY**

**Tuesday 16 March 2004**

**Second Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed – THREE HOURS***

1. Discuss the role of cytology in the diagnosis of non-neoplastic lung disease.
2. “Radical breast surgery should never be performed on the basis of fine needle aspiration cytology alone.” Discuss.
3. Which cytology samples may be obtained from the pancreatobiliary system? What are the pitfalls in interpreting these specimens?
4. A woman has a smear reported as severe dyskaryosis followed by a negative colposcopic biopsy. What are the possible causes of this situation, and how would you resolve it?
5. How do you interpret crowded cell groups in a cervical smear?



## **THE ROYAL COLLEGE OF PATHOLOGISTS**

**Tuesday 23 September 2003**

### **DIPLOMA IN CYTOPATHOLOGY**

#### **First Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed - THREE HOURS***

1. Describe the age range and routine recall intervals for population cervical screening in the National Health Service Cervical Screening Programme (NHSCSP). How may these change in the future?
2. What is meant by a failsafe system in cervical screening? Describe the failsafe systems operated by laboratories, health authorities and colposcopy clinics in the NHSCSP and how they can be monitored.
3. “Reviewing previous smears when women develop cervical cancer is a useful exercise”. Discuss.
4. Discuss the benefits and limitations of direct smears, cytopsin preparations and thin layer preparations in non-gynaecological cytology.
5. Discuss the advantages and disadvantages in the cytological reporting of fine needle aspirates (FNAs) at a “one-stop” breast clinic. What are the pitfalls in the diagnosis of malignancy on breast FNAs?



# **THE ROYAL COLLEGE OF PATHOLOGISTS**

**Tuesday 23 September 2003**

## **DIPLOMA IN CYTOPATHOLOGY**

### **Second Paper**

**Candidates MUST answer FOUR questions only**

***Time allowed - THREE HOURS***

1. Describe the morphology of endometrial cells in cervical smears. What is the significance of their presence and how should they be reported?
2. Describe the infectious agents and organisms that may be seen in cervical smears. Discuss their potential significance.
3. Describe the appearance of follicular epithelial cells in fine needle aspirates (FNAs) of the thyroid gland. Discuss the diagnostic possibilities if these cells are present and how the diagnostic options may be evaluated.
4. In which ways can imaging and cytology services usefully work together?
5. Describe how to distinguish between reactive and malignant lymph node aspirates. How may special stains and other techniques be useful and what kind of preparations are required?



# **THE ROYAL COLLEGE OF PATHOLOGISTS**

## **Part 1 Examination**

**Tuesday 18 March 2003**

## **DIPLOMA IN CYTOPATHOLOGY**

### **First Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed - THREE HOURS***

1. Discuss the advantages and limitations of the Advanced Practitioner role in cervical cytology.
2. What are the current new developments in cervical cytology and what impact may these have on the practice of cytology?
3. Discuss the importance of metaplasia in cytopathology.
4. Discuss critically the advantages and limitations of immunocytochemistry in routine diagnosis.
5. Discuss how cytology may be of use in the evaluation of industrial diseases.





# **THE ROYAL COLLEGE OF PATHOLOGISTS**

## **Part 1 Examination**

**Tuesday 18 March 2003**

## **DIPLOMA IN CYTOPATHOLOGY**

### **Second Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed - THREE HOURS***

1. Discuss the diagnostic pitfalls in serous fluid cytology.
2. What significance would you attribute to the presence of psammoma bodies in a cervical smear?
3. Discuss the value and limitations of fine needle aspiration cytology in the diagnosis of pancreatic lesions.
4. Describe the cellular changes and diagnostic pitfalls in cervical smears from postmenopausal women.
5. What possible explanation and advice should be given to the colposcopist when high-grade dyskaryosis in a cervical smear is followed by a negative colposcopy and biopsy result?



# **THE ROYAL COLLEGE OF PATHOLOGISTS**

## **Diploma Examination**

**Tuesday 24 September 2002**

### **DIPLOMA IN CYTOPATHOLOGY**

#### **First Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed - THREE HOURS***

1. Describe the criteria for an inadequate cervical smear. What measures may be taken to reduce the number of inadequate smears reported by laboratories?
2. Discuss the training and qualifications required for cytology laboratory non-medical staff.
3. Outline the role of cytology in the diagnosis of endocrine disease.
4. “Proficiency testing is a poor means by which to detect substandard performance in cervical cytology.” Discuss.
5. Discuss the relative merits of core biopsy and fine needle aspiration cytology in the diagnosis of breast disease.



**THE ROYAL COLLEGE OF PATHOLOGISTS**

**Diploma Examination**

**Tuesday 24 September 2002**

**DIPLOMA IN CYTOPATHOLOGY**

**Second Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed - THREE HOURS***

1. Describe the appearance of non-neoplastic changes in cervical smears that may mimic glandular neoplasia.
2. Discuss the reasons for false positive and false negative diagnoses in lymph node fine needle aspiration cytology (FNAC).
3. "Cytology has no role in the diagnosis of gastrointestinal disease." Discuss.
4. Discuss the value of preoperative FNAC in the management of salivary gland disease.
5. What is the sensitivity of urine cytology? Discuss the applications of urine cytology and ways of improving the sensitivity.



# THE ROYAL COLLEGE OF PATHOLOGISTS

## Part 1 Examination

March 2002

### DIPLOMA IN CYTOPATHOLOGY

#### First Paper

**Candidates must answer FOUR questions ONLY**

**Time allowed – THREE HOURS**

1. "Human papilloma virus is a necessary but not the only cause of cervical cancer". Critically discuss this statement.
2. Compare and contrast the BSCC terminology and the Bethesda system for the reporting of cervical smears. What are their relative advantages and disadvantages?
3. What are the advantages and disadvantages of offering a cytopathologist-aspirated fine needle aspiration (FNA) service?
4. Should cervical screening stop at the age of 50 years? Discuss.
5. Compare and contrast the relative merits of direct smear and thin-layer preparations in non-gynaecological cytology?



# THE ROYAL COLLEGE OF PATHOLOGISTS

## Part 1 Examination

March 2002

### DIPLOMA IN CYTOPATHOLOGY

#### Second Paper

**Candidates must answer FOUR questions ONLY**

**Time allowed – THREE HOURS**

1. What are the cytomorphological features of invasive neoplasia in a cervical smear?
2. What is the role of cytopathology in the investigation of liver disease?
3. What are the cytological features of malignant mesothelioma in a serous fluid sample? What special techniques would you use to confirm the diagnosis?
4. How may cytology be of value in the diagnosis and management of ovarian neoplasia?
5. Describe the cytological abnormalities that may result in a false positive cervical smear report.



# **THE ROYAL COLLEGE OF PATHOLOGISTS**

## **Part 1 Examination**

**March 2001**

### **DIPLOMA IN CYTOPATHOLOGY**

#### **First Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed - THREE HOURS***

1. Discuss the possible effects testing for human papillomavirus could have on the cervical screening programme.
2. Describe the grading system for breast carcinoma. How valuable is grading cells obtained by fine needle aspiration (FNA)?
3. Discuss the reasons for 'mismatches' between cervical smear reports and colposcopic cervical biopsies.
4. Write an essay on the optimum screening intervals for women in the cervical and breast screening programmes.
5. Discuss techniques in the laboratory that influence the reporting of non-gynaecological cytology samples.



# **THE ROYAL COLLEGE OF PATHOLOGISTS**

## **Part 1 Examination**

**March 2001**

## **DIPLOMA IN CYTOPATHOLOGY**

### **Second Paper**

**Candidates must answer FOUR questions ONLY**

***Time allowed - THREE HOURS***

- (ii) Describe the cytopathological abnormalities which would result in a cervical smear report of 'borderline nuclear changes'.
- (iii) Write an essay on the diagnosis and differentiation of metastatic malignancy in pleural effusions.
- (iv) Describe the diagnostic pitfalls in fine needle aspiration (FNA) cytology of hepatobiliary lesions.
- (v) Describe how false positive cervical smear reports may arise and what measures can be taken to limit this.
- (vi) Describe the diagnostic pitfalls of non-FNA cytology of pulmonary lesions.

THE ROYAL COLLEGE OF PATHOLOGISTS

Part 1 Examination

September 2000

DIPLOMA IN CYTOPATHOLOGY

**First Paper**

**Candidates must answer FOUR questions ONLY**

Time allowed - THREE HOURS

1. What are the roles and responsibilities of a “hospital based programme co-ordinator” for the NHS Screening Programme?
2. How would you establish a “one-stop” clinic for head and neck lesions? What are the advantages and limitations of cytology in this anatomical location that you need to explain to your clinicians?
3. Give a cytomorphological account of specific infections that can be detected using routine cytological stains.
4. How would you investigate a suspected problem in cervical cytology? Describe in brief the management of an incident in the NHSCSP.
5. Discuss the guidelines for breast cytology in the NHS Breast Screening Programme.



THE ROYAL COLLEGE OF PATHOLOGISTS

Part 1 Examination

September 2000

DIPLOMA IN CYTOPATHOLOGY

**Second Paper**

**Candidates must answer FOUR questions ONLY**

Time allowed - THREE HOURS

1. Discuss the role of urine cytology in urinary tract diseases.
2. Give an account of cytology of lymph nodes in non-neoplastic conditions.
3. Give an account of semen analysis in the investigation of infertility.
4. Give an account of the difficulties in the identification of dyskaryosis in cervical smears.
5. How do you identify metaplastic cells in cervical smears? What is the significance of these cells and what interpretive problems do they cause?