Preparing for the part 2 practical examination towards membership of the Royal College of Pathologists

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Abstract

Membership of the Royal College of Pathologists is usually obtained by passing the MRCPath. examinations. The part 2 exam in histopathology (practical component) is taken towards the end of one's training in histopathology and is designed to test the candidates in a wide variety of skills and knowledge. This difficult examination has a significant failure rate. This article outlines the background to the examination, the exam format and gives practical tips on how best to prepare for it. In addition, advice is given on how to answer the questions and how to avoid the common pitfalls.

Keywords certification; college admission test; competence; education; England; Europe; examination questions; Great Britain; pathology; problems and exercises; speciality boards

Introduction

This article gives a personal account of preparation for the part 2 MRCPath. exam in histopathology. Having recently successfully negotiated the examinations, I hope to share some useful information and advice.

Everyone has their own study technique and preferences and so the reader is welcome to discard that which is not suitable to their own study technique, but will hopefully glean one or two useful pointers. The part 1 examination is not considered in this article. While every effort has been made to keep the information provided accurate, candidates are advised to check the Royal College of Pathologists website for any alteration to the exam format.

Where does the MRCPath exam fit in my career progression?

Obtaining a post as a consultant histopathologist in the UK requires one to be on the specialist register of the General Medical Council (GMC). Currently, one is only placed on the specialist register after formal recommendation to the GMC by the Post Graduate Medical Education and Training Board (PMETB).¹

Jason Lyle Stone MB ChB FRCPath is Consultant Histopathologist at the Department of Histopathology, Doncaster and Bassetlaw Hospitals NHS Foundation Trust, Doncaster Royal Infirmary, Doncaster, UK. PMETB allow two main routes to the specialist register. Doctors who have trained in the UK attain a Certificate of Completion of Training (CCT) in histopathology while doctors who have not trained in the UK apply under Article 14. Article 14 applications, which involve assessment of relevant overseas qualifications and experience, are beyond the scope of this review and will not be discussed further.

Since PMETB is responsible for overseeing the award of CCTs in all 58 medical specialities (including general practice), it lacks the resources to scrutinise the finer details of postgraduate training. Therefore, PMETB is heavily reliant on (and indeed liaises closely with) the Royal Colleges, including the Royal College of Pathologists (RCPath). The RCPath will recommend to PMETB that a particular candidate is suitable to receive a CCT if the candidate has:

- satisfactorily completed the minimum period of training and
- acquired a record of in-training assessment (RITA) form G from the local Deanery and
- obtained membership of the Royal College of Pathologists (MRCPath) by examination.¹

Obtaining membership by examination requires the trainee to pass both the part 1 and the part 2 exams. The part 1 exam tests theoretical knowledge and is taken early in training while the part 2 exam tests practical knowledge and skills and is taken towards the end of training.

When, where and how much?

The examinations are held twice a year in spring (March/ April) and autumn (October/November). The dates are published on the Royal College's website. The closing date for applications is usually several months in advance of the examination date.

The College chooses several exam centres across the UK to host the exams. Candidates are advised of their centre by post approximately 3 weeks before the exam.

The examination has two components – a 2-day practical paper covering histopathology and cytopathology, and a 1-day autopsy paper.² Currently the exams cost £465 for the practical and the £425 for the autopsy component (£890 for both components) regardless of whether it is a first or subsequent attempt. Candidates who apply to sit the examination and subsequently withdraw will usually forfeit the examination fee.³ Both components must be passed to complete the exam. Candidates are permitted four attempts at the examination.³

What is the pass rate?

Figures published on the RCPath website do not allow one to determine whether candidates sitting both components of the examination are doing so as their first or subsequent attempts. Recent published results however show that in spring 2006, 45 of the 90 candidates passed the practical component (50% pass rate) and 61 of the 86 candidates passed the autopsy component (70% pass rate). In autumn 2006, of the 58 candidates sitting both components, 17 failed both, 20 failed one component and 21 passed both.

Candidates who fail one component, but pass the other, do not need to resit the passed component.

What is the exam format?

The autopsy component takes 1 day to complete while the practical component spans 2 days. A candidate will normally sit each component in different centres. The current format is described below. Although this may vary slightly in future, the general arrangement is expected to remain the same.

Autopsy⁴

• Autopsy including case notes review, external examination, evisceration, dissection, case presentation and discussion – 3 hours. Candidates may bring with them a pre-printed proforma on which to record their findings.

- Case write up 90 minutes (done by hand, so make sure your proforma is adequate!).
- Two long cases 45 minutes each.
- Viva 30 minutes.

Practical

• 20 surgical short cases (20 minutes per two cases).

• Two pathology objective structured pathology examinations (OSPE) stations (20 minutes per station, one of which is examined by viva).

• Two cytology OSPE stations (20 minutes per station. One of these relates to cervical screening cytology, the other to non-gynaecological cytology).

• Four long cases (20 minutes per case).

• 10 cytology short cases (five cervical screening cytology cases and five non-gynaecological cytology cases). Candidates can currently choose whether they will be examined using liquid-based or conventional cytological preparations.

• Six frozen sections (40 minutes to review the slides, presented in two sets of three slides, plus a 20-minute viva).

• Six macroscopic cases (40 minutes to review photographs of the cases, presented in two sets of three photographed cases, plus a 20-minute viva).

Preparation for the exam

The amount of time required for preparation will depend upon the individual candidate's baseline knowledge and pace of revision.

In general, most successful candidates begin serious preparation 6–12 months before the exam. It is important not to spend too long as one can easily suffer from exhaustion and burnout. Personally I started thinking about the exam a year before writing it, but only began serious revision 6 months prior to sitting the exam.

Although some candidates pass with less preparation time, most candidates who fail do so because they were underprepared rather than incompetent. There is no escaping the fact that the exam is difficult, expensive and not worth repeating – so make sure you give 100% effort to passing it first time!

There are essentially three aspects to the exam preparation:

- slide sessions
- background reading
- autopsy preparation.

Each aspect will be discussed individually.

Slide sessions

The practical part of the exam has a heavy bias towards slide reporting (both cytology and histology). It is vital to pass these components. Borderline candidates who have narrowly failed some vivas or long cases may still pass, provided that they have done well in the surgicals and the cytology. However, a fail in either the surgicals or the cytology component is critical and often results in an overall failure.

There is no better preparation for reporting a slide in an exam than having seen an identical case before. It is therefore worth trying to see as many slides as you can before the exam. It is worth remembering, however, that the examination does not require the candidate to have seen examples of every rare disease, and indeed focuses on diseases that present relatively commonly in normal practice.

On some days, test yourself under examination conditions. Ask your consultants to provide you with a mock exam set. Sit in a quiet room and do the exam with strict adherence to the stop-watch. The exam allows 20 minutes for two slides. The slides are passed on to the next candidate after 20 minutes. There is, therefore, little chance to go back to an earlier slide you were not sure about, and once you have passed a slide set to the next candidate, there will be no opportunity to see it again. You need to practice the skill of examining a slide and writing your answer in a legible manner in under 10 minutes. The same time pressure applies to the cytology slides. In general, one will spend approximately 3 minutes examining the slide and 7 minutes writing the report – a formidable pace at first. The structure of the reports is considered below.

Ask your consultants and colleagues who have recently passed the exam to mark your answers and give feedback.

Try to see every frozen section that comes into your department. Although you are encouraged to make notes about the frozen sections in the examination, you will be marked on your ability to discuss the cases in the viva, both as if you were discussing the case with a colleague, and particularly as if you were reporting the case to the requesting clinician.

When preparing for the cervical screening cytology cases, make sure you are familiar with the common pitfalls. These include certain infections, metaplasias, atrophic smears, small cell severe dyskaryosis, pale cell severe dyskaryosis and glandular abnormalities.

Background reading

Before commencing, it is useful to establish your reading list. This will be a list of key articles and chapters you want to read. The review articles found in *Current Diagnostic Pathology* provide an excellent source of up-to-date and concise reviews. The *Recent Advances in Histopathology* series (The Royal Society of Medicine Press Ltd) and the *Progress in Pathology* series (Cambridge University Press) are also very popular publications with candidates.

It would be wise to focus particularly on the British journals namely *Histopathology* and *Journal of Clinical Pathology*. Do not get carried away and read every article over the past few years. Similarly do not get held up by very molecular articles. Select wisely and concentrate on the review articles. There is too much to read and not enough time otherwise. It is important to have a sound grasp of basic pathophysiology, particularly for the autopsy component. The first half of *Robbins and Cotran Pathologic Basis of Disease* (7th edn, WB Saunders) or a similar textbook is useful in this regard. You may not need to revise this if the interval between the MRCPath part 1 and the part 2 attempts is short. Examiners will be unimpressed if, after presenting your autopsy finding of a pulmonary thromboembolus you cannot define what 'embolus' means!

You should have a firm understanding of the anatomy that is relevant to surgical specimens and to autopsy practice. Revising the anatomy of a mesorectal excision, prostatectomy, laryngectomy, radical neck dissection, etc. will be particularly helpful for the macroscopy viva.

Skimming through a colour atlas of macroscopic pathology is a quick and easy way to help you recognise a previously unseen pathology in your autopsy. Although the macroscopy viva focuses on how you would select blocks from each of the six cases, examiners will commonly expect you to have some idea of the diagnosis based upon the macroscopic appearance.

There are varying opinions about which textbooks one should read. Some candidates swear by the necessity to read large books such as *Rosai and Ackerman's Surgical Pathology* (Mosby, 2004), while others suggest choosing key chapters of difficult topics. This is entirely a personal decision. The World Health Organisation's '*Blue books*' (IARC Publications) provide an alternative to large textbooks, although these are mostly limited to neoplastic conditions.

The '*Biopsy Pathology of* ...' series (Hodder Arnold), particularly those relating to the breast and endometrium, may help candidates avoid common pitfalls.

The Royal College of Pathologists website is an essential read. Virtually all of the documents published on the website are relevant to the exams in some way. It is imperative that you have a firm grasp of the minimum data sets as this is assessed in the macroscopic viva. A quick perusal of the past few years' *Royal College Bulletins* (if you still have them) will also help cover some key issues.

The various publications relating to histopathology/cytopathology produced by the National Health Service (NHS) cervical screening and breast cancer screening programmes are useful reading. In the cervical screening cytology section of the exam, you will be expected to give the appropriate management guidelines e.g. 6-month repeat, urgent recall etc. as per the national guidelines. Candidates should make themselves aware of these management guidelines. Foreign candidates should be familiar with the current terminology employed in the UK (mild/moderate/severe dyskaryosis rather than Bethesda classification).

You should make sure that you read relevant documents that are not part of the mainstream pathology reading list. For example, the British Society of Gastroenterology, Human Tissue Authority, the Department of Health and the NHS all have websites with recent publications, which pertain to histopathology. Also included in this category are recent topical issues relating to the Carter Review of Pathology and modifications to the Coronial System. Some useful websites are listed in Table 1.

You need to make sure that you know something about a variety of 'hot-topics' that are not directly covered in your histopathology reading. Make sure you ask your peers and consultants for suggestions. These include audit, telepathology, *Agenda for*

Safety checks

Before committing to any answer in the practical component of your exam, ask yourself a few quick questions:

- 1. Does the history match my diagnosis?
- 2. Does the macroscopic description match my diagnosis?
- 3. Does my diagnosis match the age, sex and site?
- 4. Have I looked carefully at all of the tissue on the slide?
- 5. Have I identified the tissue of origin?
- 6. Are all of the anatomical layers of the tissue included?
- 7. Is there more than one diagnosis on the slide and are they related?
- 8. Is there any evidence of treatment, surgery or radiotherapy?
- 9. Do I need to polarise the slide?
- 10. Have I missed any granulomas?
- 11. Is this endometriosis?
- Is there amyloid? If the case history includes conditions like rheumatoid arthritis, then mention that you would look for amyloid, even if you do not see it in the slide.
- 13. Do I see any organisms?
- 14. Could my malignant diagnosis be benign and similarly could my benign diagnosis be malignant?
- 15. Could this be a metastasis?
- 16. Does this case need to be reviewed by a second pathologist?

Table 1

Change, NHS reforms, clinical governance, national service frameworks and Cancer networks. Be sure to understand the principles of work as a consultant namely continuing professional development, external quality assessment, appraisal and revalidation.

Even if you do not work in a research post, make sure you understand some basics about the legal and ethical issues of using human tissue in research. These topics tend to turn up in some form in the viva components.

In summary, while there is a lot of reading to be done, you cannot physically read everything; therefore choose your reading list wisely. If you prepare early enough, there is sufficient time to do the necessary reading.

Autopsy preparation

It is pretty obvious, but the reality is that the best preparation is having performed numerous post-mortem examinations yourself. Ideally you will have completed approximately 100 autopsies before you attempt the examination. Make sure you get to do any autopsy that is available and try to do each one as if it were an exam. Ask your supervising consultant to 'test' you afterwards as you present your findings. While your ability to perform the dissection is important, your presentation of the findings and ability to correlate these with the clinical history is a crucial component to the exam. Practice this with colleagues and consultants as often as you can.

There is no need to take any equipment with you to the examination – the centre will have everything that you need for the autopsy itself, and will provide a microscope for use in the long cases.

You are given 3 hours to perform the autopsy, but you should aim to be able to complete the examination within 2 or 2.5 hours. Remember to perform a thorough external examination, including a careful search for surgical scars. Scars caused by laparoscopic surgery may be difficult to find. You are not expected to perform specialist dissections within this time, such as dissection of the cardiac conducting system, the removal of the spinal cord, eyes, or a long bone. You should be able to describe these techniques if needed to the examiners, and should state that you would like to go on to perform them if your autopsy findings or the clinical history indicate that they are relevant. You should test for the presence or absence of a pneumothorax, and it is worth collecting blood and urine for further investigations in the unlikely event that your autopsy fails to reveal a cause of death. The anatomical pathology technician will assist you by incising the scalp and the skull, but candidates are expected to remove the brain themselves.

You are not expected to present or discuss your findings until the end of the autopsy, but it is not uncommon for examiners to appear at various points during the morning to observe your technique. You should appear to have performed autopsy dissections before! Be prepared for this and the fact that the anatomical pathology technician may also be watching to see if you practice safely.

At the end of your autopsy, allow yourself some time to clean yourself, the organs, the body, and the bench. Prepare your presentation mentally and formulate a logical cause of death in Office of National Statistics (ONS) format (in which part 1 pertains to the disease(s) that directly caused death and part 2 includes other diseases not related to those cited in part 1, but which contributed to the cause of death). Try to predict what kind of questions you may be asked about the particular case.

The presentation of the organs needs to be neat and tidy. Having placed a dissected organ into the tray or onto the bench, its appearance can be kept fresh by covering it with a damp towel. Group tissues according to organ system. Small but important structures, such as parathyroid glands, the pituitary gland and relevant sections of coronary arteries can be placed into bottle caps, which has the advantage of you being able to find them easily when needed.

When demonstrating your findings, try to adopt as much of a 'no touch' technique as possible. Use a probe or forceps to point to the relevant finding. Avoid the temptation to 'fiddle' with tissues. Your presentation must be clear, logical and thorough, with attention to pertinent negative findings and should appear wellrehearsed. Focus on the cause of death first, which should be presented in the ONS format. Appear calm and confident, and look the examiners in the eye.

The examiners place a lot of emphasis on clinicopathological correlation at the time of presentation. Show them that you have considered the kind of questions the Coroner, the clinicians or the relatives might want to know the answers to. Examiners often use the post-mortem findings to test basic pathophysiology and anatomy. For example, you may be asked about the formation of thrombus or the pathophysiology of congestive cardiac failure, how to identify one or other ventricle in an abnormal heart, or the appearance of common pathologies that occur within the brain.

Procedures that candidates often forget include stripping the dura to examine the bones of the skull, removing the pituitary gland, removing the testicles, demonstrating the pancreas and biliary tree, and testing for a pneumothorax. While forgetting these simple procedures is unlikely to fail a candidate outright, neglecting them looks clumsy and unprofessional.

After the autopsy and its presentation, you will spend 90 minutes writing-up your findings into a report. You are not permitted to use a computer to do this. While the candidates write the reports the examiners will be in the mortuary carefully reviewing (and re-dissecting if needed) the tissues.

In the long cases section, the candidate is supplied with two post mortem reports. Each is accompanied by additional materials, which may include macroscopic photographs, histological slides, immunohistochemically-stained slides, and other information such as a toxicology report (which should be accompanied by normal ranges) or an asbestos fibre count (which may not be accompanied by normal ranges). You are expected to summarise the important positive and negative findings in the report, review and comment on the findings in the additional materials provided, formulate a cause of death and give a clinicopathological correlation that explains how the pathological findings caused death and relate to the clinical history.

One of the long cases has a forensic slant. Make sure you know about the post-mortem examination of bodies recovered from water, bodies recovered after a fire, drug overdose deaths (including illicit drugs), suicides, post-operative deaths, anaphylaxis, maternal deaths and road traffic deaths. You should be familiar with industrial lung diseases, and especially with asbestos-related diseases.

Some background reading is helpful. Suggested books include:

• *The Hospital Autopsy*, 2nd edn – Burton JL, Rutty GN (Arnold Publishers, 2001).

• *Knight's Forensic Pathology*, 3rd edn – Knight B, Saukko P (Arnold Publishers, 2004).

• The 'Essentials of Autopsy' practice series – Rutty GN (Springer-Verlag London Ltd).

• Coroners' Courts: a Guide to Law and Practice, 2nd edn – Dorries C (Blackstone Press, 2004).

You should also read the RCPath autopsy guidelines (2002) and best practice scenarios (2005) and be familiar with the Human Tissue Act, 2004.

In the viva, you may be asked about the coronial system, procurator fiscal (in Scotland), health and safety in the mortuary, NCE-POD and the Human Tissue Act, in addition to any autopsy-specific questions. Previously some candidates from Scotland have struggled with questions about the English and Welsh coronial system. You should ensure that you know something about both systems.

How to write your answers

The Royal College does not officially publish its marking scheme. Although the actual figures may vary in reality, the College essentially operates a closed-marking scheme. An example of such a scheme is one where each answer is scored on a 1 to 5 scale:

- a score of 5 is almost never given (even for a perfect answer)
- a score of 4 is occasionally given for really good answers
- a score of 2.5 or 3 is given for a safe pass

• a score of 2 is for a close fail and a 1 is awarded for a bad fail. This system means that candidates have to perform reasonably well in all of the cases because it is very difficult to redeem a poor mark in one case with a good mark in another case. A benign versus malignant error is critical and automatically scores low marks. Consider those diagnoses that are easily overlooked. Always ask yourself "Could this be a common pitfall (a malignant disease that appears benign, or a benign disease that appears malignant)?" See Table 2 for further points.

A typical answer format is as follows:

• A succinct description of the tissue on the slide listing the key diagnostic features (do not waffle here as verbosity scores you very few points!).

• A diagnosis, or if necessary the differential diagnosis and how you would differentiate the differential diagnosis e.g. by immunohistochemistry or histochemical stains. You are expected to mention what results you would expect from any further tests.

• Additional comments to try to earn yourself an extra mark or half mark. These could include expected results of any relevant cytogenetic testing, electron microscopy, a comment on prognosis if relevant, need for any extra blocks, any additional minimum data set information, a comment on need for multidisciplinary team meeting (MDT) referral or specialist referral.

• If the entity is part of a wider syndrome e.g. Carney's syndrome or neurofibromatosis, then mention so.

There is a fine balance between being over confident (i.e. potentially unsafe) and overly cautious.

If you are being tested on a specific entity that you recognise as such, then be confident and give the diagnosis without requesting additional investigations (though you may gain credit

Useful websites

Organisation	Website
General Medical Council	www.gmc-uk.org
Postgraduate Medical	www.pmetb.org.uk
Education and Training Board	
The Royal College of	www.rcpath.org.uk
Pathologists	
The British Society of	www.bsg.org.uk
Gastroenterology	
The Human Tissue Authority	www.hta.gov.uk
The Association of Clinical	www.pathologists.org.uk
Pathologists	
Carter Review	www.advisorybodies.doh.gov.uk/
	pathologyreview/index.htm
Coroner Reforms	www.publications.parliament.uk/
	pa/cm200506/cmselect/cmconst/
	902/902i.pdf
National Confidential Enquiry	www.ncepod.org.uk
into Patient Outcome and	
Death	
NHS Structure and	www.nhs.uk/England/
organisation	AboutTheNhs/Default.cmsx
Agenda for Change	www.nhsemployers.org/pay-
	conditions/agenda-for-change.cfm
NHS Cancer Screening	www.cancerscreening.org.uk
Programmes	

for stating that, although investigations are not required you would expect the entity to have a particular immunohistochemical, histochemical or cytogenetic profile).

Some slides are included where the diagnosis is not possible on the tissue provided. In these cases you are expected to show a logical and safe approach to the case by explaining how you would reach a diagnosis. If you have a differential diagnosis, but favour one, then say so. If you know the diagnosis, but are aware of realistic pitfalls, then mention these (e.g. "This is extra-mammary Paget's disease of the vulva. I would request an \$100 to exclude the lesser possibility of malignant melanoma").

Do not just write a meaningless list of immunohistochemical investigations - instead, state the expected results of these.

Sample answer 1

This section of skin comprises epidermis, dermis and some subcutis and contains abundant sebaceous glands consistent with the stated origin from the scalp. There is a spindle cell neoplasm in the superficial dermis extending into deeper dermis. There is moderate nuclear atypia and mitotic figures are frequent (including atypical forms). There is no obvious differentiation. No pigment is seen. The overlying epidermis shows marked actinic damage. There is no vascular invasion. No 'lace-like' infiltration of fat is seen.

Conclusion: This is a malignant spindle-cell neoplasm and is most likely to be a spindle-cell squamous carcinoma based on this morphology.

Diff Dx: Spindle cell melanoma

Atypical fibroxanthoma (less likely in a patient of this age) Another form of sarcoma, e.g. leiomyosarc, DFSP or PNST

I would do panel of immunos to help: I'd expect:

	SCC	Melanoma	AFX
cytokeratin	positive	negative	negative
5100, HMB45	negative	positive	negative
CD68	negative	negative	variably positive
/imentin	negative	negative	negative
ASMA	negative	negative	negative
CD34	negative	negative	negative

Extra blocks to assess margins.

If no connection to epidermis in extra blocks, then I'd raise the possibility that this could be a cutaneous metastasis. May need referral to skin MDT.

Sample answer 2

These are three fragments of columnar-lined mucosa with one of the fragments containing a small portion of stratified squamous epithelium.

All three fragments include underlying submucosa. There is a partial villiform architecture with focal intestinal metaplasia. There is mild chronic inflammation. There is no acute inflammation or ulceration.

No specific infective features are seen. There is no dysplasia or malignancy.

No native oesophageal glands are seen.

The features are corroborative of an endoscopic diagnosis of Barrett's oesophagus. Negative for dysplasia.

In the above sample answer, if you saw dysplasia you should note the grade, briefly mention the expected management outcome and mention that it is good practice for such a diagnosis to be reviewed by a colleague with an interest in gastro-intestinal pathology.

In the cervical screening cytology section, a typical answer is as follows:

Sample answer 3

This is a well preserved cervical smear of adequate cellularity. Endocervical cells are sampled and are normal.

The pattern is inflammatory, with numerous polymorphs.

Some squamous epithelial cells show mild nuclear enlargement with faint perinuclear haloes, but there is no dyskaryosis. These are reactive changes secondary to inflammation only.

There are no features of HPV infection.

Numerous Candida spores and hyphae are seen.

Conclusion: Negative smear, Candida infection. Advise routine recall.

Types of cases

• Some of the cases are impossible on the single H&E. Stay calm and give a logical description of how you will get the answer.

• Some cases are easy and you are expected to give the answer without being vague or non-committal.

• Some cases have a double diagnosis. Therefore, if you find Kaposi's sarcoma for example, then look for other immunosuppression-related illnesses. If you do not find them, then at least mention that you would look for them.

• Some cases are classical benign versus malignant mimics, e.g. nodular fasciitis.

• Some cases are straightforward cases seen everyday. These are to test your use of current terminology, e.g. Barrett's oesophagus or your use of a minimum data set, e.g. melanoma.

• Some will be common disorders but at unusual sites.

The main philosophy behind the exam is not to test that you know every single rare entity, but to ensure that you are safe: that you know when to use immunohistochemistry, that you know when to refer (e.g. bone tumour) and that you know what the pitfalls are and how to avoid them. See Table 1 for a list of useful safety checks.

The long cases include liver biopsies, renal biopsies, bone marrow biopsies or complicated tumours/lymphomas accompanied by several immunohistochemical preparations. Be prepared for the fact that you may not be provided with all of the immunohistochemical stains that you require to make a definitive diagnosis.

What are OSPEs?

These are objective structured pathology examinations. There are several OSPEs during the course of the practical examination. Two relate to surgical pathology and two relate to cytology. These are usually in the format of short answers based on some macroscopic or microscopic photos, a histopathology report, or aspects of cervical screening cytology laboratory management. Sometimes you may be given some written information (e.g. completed

minimum data set) and be asked various questions about it. One of the non-gynaecological OSPEs is conducted by viva examination and relates to aspects of laboratory management.

What are vivas?

These are short oral examinations conducted by two examiners. One viva will cover the frozen section slides, one will cover the macroscopy photos and another will cover general management issues. For many candidates, particularly those for whom English is not their first language and those unfamiliar with oral examinations, these are the most nerve-wracking and stressful of the exam components.

The key to passing these sections is to make sure that you are able to convince the examiners that you are ready for a consultant post. It is best to play the part by dressing appropriately, answering as a consultant would and not as a trainee would. Greet the examiners, shake hands and smile. Look the examiner in the eye and do your best to portray yourself as confident and in control.

Remember to be safe and know your limitations. If you are asked about a scenario that is clearly beyond your expertise, e.g. a murder autopsy, then the correct thing to do is to answer the question by stating that you would involve a Home Office pathologist as that kind of examination is beyond your expertise. Some questions are designed to make sure that you are not a maverick who is unaware of their own limitations.

If you do not understand a question, there is no shame in asking it to be explained to you. Always give yourself a few seconds to think before answering any question.

Never get into an argument or disagreement with the examiner. Remain polite and courteous at all times. Sometimes, the same question may be repeated in a slightly different way, often with an "are you sure?" comment thrown in. This may mean that your initial answer is incorrect or incomplete, and that the examiner is giving you a second chance to redeem yourself. Equally, your answer may be correct and the examiner is trying to test the conviction with which you have given it!

Do not over-commit yourself on a frozen section diagnosis unless you are certain. There may well be cases where you are not expected to make the final diagnosis on the frozen section. In these cases, the correct answer may well be "defer diagnosis until paraffin sections". Remember, the frozen section diagnosis can be benign. Do not be surprised if the examiner pretends to be a surgeon and tries to "lure" you into over-committing yourself. Again, if you encounter a pathology that you have not seen before, there is no shame in admitting so and stating that the correct path of action is to defer the case to paraffin sections. You should not need to defer all of the cases to paraffin section!

The general management issues will be asked in the local British context. For foreign candidates, it will be useful to be acquainted with the daily running of a histopathology laboratory in the UK.

On the day

Arrive early and set your microscope up the day before (for the practical part of the exam). Most centres expect you to provide your own microscope, however, you can arrange beforehand for one to be provided for you.

Do not forget to take a polarizer and a spare bulb. Make sure you know how to set up your microscope before departing. You do not want to be stressing with setting up a microscope a few minutes before the exam is scheduled to start.

The days are long and very tiring. Three hours of reporting a new surgical short case every 10 minutes without a break can exhaust even the most robust pathologist. Take a small quiet snack and something to drink into the exam with you. Take something warm in case the air-conditioning is too cold for your preference. Take several pens.

Do not be disheartened by a difficult slide or OSPE station. If there is something you do not know, then remain calm and give your safest answer to try and bail yourself out. You need to fight for every mark you can get and need to remain focussed throughout the examination. With the significant time pressure, you cannot afford to dawdle on a difficult case. Allowing yourself to spend more than 20 minutes on a set of two slides, subsequently resulting in less time for the next two, is a recipe for failure.

Similarly, at lunch sessions, try your best not to get drawn in detailed discussion about the cases with the other candidates. You have written your answers to the best of your ability, and cannot change them. Ultimately, such examination post mortems are unhelpful. You might find yourself despairing and losing confidence unnecessarily. Just because another candidate has given a different diagnosis for a particular case to the one you selected, it does not necessarily mean that you were wrong!

Conclusions

The part 2 exam is difficult. The examiners are not trying to fail you, but are looking to see if you will fail yourself. Remember that many good pathologists have failed the examination on one or more occasions. Failure is disappointing but there is no shame in it. There is no escaping the fact that it requires a lot of hard work and dedication. By making the exam application, you will be committing yourself to many long, lonely hours of preparation. Give it your best shot first time around and good luck.

Note added in proof

Later this year, the Royal College of Pathologists are going to change all MRCPath qualifications to FRCPath instead.

REFERENCES

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- **3** The Royal College of Pathologists. Regulations and Guidelines for 2007 College examinations for Membership and Diplomas; Revised October 2006.
- **4** The Royal College of Pathologists. MRCPath Part 2 examination autopsy module. Guidelines for examiners and candidates; Revised March 2006.

Practice points

- Organise your reading list early
- Speak to colleagues who have passed recently
- See as many slides and frozen sections as you can
- Practice with a stopwatch to get used to the time pressure
- Perform every autopsy as if it were an exam
- Know your limitations
- You absolutely have to pass the surgicals and the cytology components
- Do not panic on the day

Acknowledgements

145

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