Stage D training in Cytopathology

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St Thomas’ Hospital
Background

• Current training 60-66 months depending on additional modules

• Stages A – D
  – ST1/stage A [12mths]  (500 surgicals, 150 cervical and 150 diagnostic)
  – ST2/stage B [12mths]  (750 surgicals, 200 cervical and 200 diagnostic)
  – ST3/stage C [24mths]  (1000 surgicals, 300 diagnostic)
  – ST4/stage C                  (1000 surgicals, 300 diagnostic)
  – ST5/stage D [12 mths] (1500 surgicals, 300 diagnostic)

• Stage D
  – post-exam
  – 12 months
Histopathology training pathway
(Royal College of Pathologists - RCPPath)
This is a run-through training programme.

FRCPath - Fellowship of the Royal College of Pathologists
OSPE - Objective Structured Practical Examination
ST - Specialty Training
CCT - Certificate of Completion of Training

† Specialty training – either general histopathology, or subspecialty training in forensic pathology, neuropathology and paediatric pathology.
~ Specialty training or subspecialty training in cytopathology.

Stage A ↔ Stage B ↔ Stage C ± ↔ Stage D ~

Histopathology

ST1 → ST2 → ST3 → ST4 → ST5 → CCT

Year 1 OSPE → Part 1 FRCPath Examination → Part 2 FRCPath Examination

Note: You will need to pass Year 1 Objective Structured Practical Examination at the end of stage A/ST1 in order to progress to Stage B.

Note: You will need to pass Part 1 FRCPath Examination at the end of stage ST3 in order to progress to Stage C.

Note: You will need to pass Part 2 FRCPath Examination at the end of stage ST4 in order to progress to Stage D.

Prior to starting your specialty training you need to have completed a medical degree followed by the two-year foundation programme or have equivalent competences prior to applying to ST level.
Advanced cytopathology training

• Cytology component of standard stage D:
  – 300 cases

• Subspecialty training in Cytopathology
  – Introduced in 2007 curriculum
  – Replaced diploma in cytopathology
  – Poor uptake
Subspeciality training in Cytopathology

- Competency-based training
  - no formal final examination

- Assessment
  - summative portfolio
  - WBPAs
Aims (1)

• Competencies of a specialised cytopathologist

• Act as local lead
  – Advise clinical colleagues on sampling taking and submission
  – Knowledge of ancillary testing
  – Teaching experience in workplace and formal settings
  – Function in a MDM setting

• Diagnose majority of cytology samples independently
  – Manage non-correlation between cytology and other investigations including histology and colposcopy
Aims (2)

- Report in a ‘rapid diagnosis’ one-stop clinic setting
- Perform fine needle aspirates (FNAs)
- Detailed knowledge of NHSCSP
  - Interpret quality assurance data
  - Interpret performance indicators
Entry to programme

- Satisfactory completion stages A-C with FRCPath Parts 1 and 2 in histopathology

<table>
<thead>
<tr>
<th>Cervical cytopathology</th>
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<tbody>
<tr>
<td>3 months equivalent (stage C or D)</td>
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<tr>
<td>500 cervical cytology cases, majority new screening cases</td>
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<tr>
<td>4 x WBPA (all directed)</td>
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<td>CHCCT exam</td>
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Subspecialty training in Cytopathology

• Structured educational programme

• Stage D entirely within cytopathology
  – whilst continuing to accumulate the histopathology competencies for completion of Stage D

• Broad scope
<table>
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<tr>
<th>Reporting</th>
<th>Technical skills</th>
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<tbody>
<tr>
<td>12 months equivalent</td>
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<tr>
<td>1000 gynae cytology cases, majority new screening cases</td>
<td>15 x FNA clinics</td>
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<tr>
<td>1000 diagnostic cytology cases, appropriate mix of specimen sites and types</td>
<td>15 x endoscopic US-FNA clinics</td>
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# Assessment

<table>
<thead>
<tr>
<th>18 WBPA</th>
<th>12 directed</th>
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<tr>
<td><strong>Training portfolio</strong></td>
<td><strong>Structured case-log</strong></td>
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<tr>
<td></td>
<td>FNA experience</td>
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<tr>
<td></td>
<td>Endoscopic US-FNA experience</td>
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<tr>
<td></td>
<td>EQA performance</td>
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<td>Colposcopy MDM experience</td>
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<td>Personal performance monitoring data</td>
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<td>Cervical cancer audit case</td>
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<td></td>
<td>Histopathology/cytopathology correlation cases</td>
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<td></td>
<td>Critical review of errors</td>
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<tr>
<td><strong>Educational supervisor’s report</strong></td>
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<tr>
<td><strong>ARCP outcome 6</strong></td>
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**WBPAs (1)**

<table>
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<tr>
<th><strong>DOPS</strong></th>
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<tbody>
<tr>
<td>Perform FNA using an aspiration technique</td>
</tr>
<tr>
<td>Perform FNA using a non-aspiration technique</td>
</tr>
<tr>
<td>Spread and stain a direct smear from an FNA</td>
</tr>
<tr>
<td>Assess adequacy of a targeted aspirate from a deep lesion</td>
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<table>
<thead>
<tr>
<th><strong>CBDs</strong></th>
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<tr>
<td>Provide second opinion/review on a case previously reported</td>
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<tr>
<td>Discuss a case where morphology and ancillary studies give inconclusive results</td>
</tr>
<tr>
<td>Discuss a case assessed in a rapid diagnosis clinic where an immediate report was not appropriate</td>
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<tr>
<td>Discuss a case where ancillary studies were essential to the diagnosis</td>
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## WBPAs (2)

<table>
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<th>ECEs</th>
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<tr>
<td>Present a non-cervical case at an MDT where there are discordant cytological findings</td>
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<tr>
<td>Discuss statistical data prepared for KC61 returns</td>
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<tr>
<td>Audit and present cytology performance in an area of specialist practice</td>
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<tr>
<td>Explain procedure and take consent for a fine needle aspirate</td>
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Our experience

- Based at St Thomas’ Hospital
- 35000 gynae cases/yr
- 6500 non-gynae cases/yr
Cytology service at St Thomas’

- Eight consultants
- Daily ‘on-call’ rota
  - Same day service for urgent samples
  - Wet preparation
    - cross-polarisation
    - phase contrast microscopy
  - Immunofluorescence
  - Triage of needle washings for ancillary testing
My role

• Clinical service duties
  – Review and interpret most specimens
  – Progressive responsibility for caseload
  – Performing FNAs of palpable lesions
  – Performing ROSA for FNAs
  – Selection and interpretation of ancillary studies
  – On-call responsibility
  – Supervising consultant available at all times
FNA experience

• Utilising both aspiration and non-aspiration techniques

• Experience of multiple environments:
  – Wards
  – ITU
  – Theatres
  – Dedicated ‘palpable lump’ clinic

• Impact of imaging
  – Difficulty gaining numbers
  – Opportunity to collaborate
ROSA (1)

- Rapid on site assessment
  - urgent ward FNAs
  - U/S guided H+N clinics
  - EBUS clinics
• Adequacy
  – Time vs risk of false -ve

• Communication

• Ancillary testing
  – Small samples
Other responsibilities (1)

• Multidisciplinary meetings
  – lead colposcopy MDMs
  – presented at other relevant MDMs (thyroid, H+N)

• Teaching
  – Attend and assist in weekly FNA teaching
  – Formal teaching slot
    • departmental teaching/blackbox rota
    • ST1 teaching week
Other responsibilities (2)

• EQAs
  – Continuing participation in gynae cytology EQA

• Management
  – First port of call for technical and clinical questions from BMS, screeners and clinical staff
  – Monthly consultants cytology meeting
## Subspecialty training in Cytopathology

<table>
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<tr>
<th>Pros</th>
<th>Cons</th>
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<tr>
<td>Wide spectrum of caseload</td>
<td>Double the assessments</td>
</tr>
<tr>
<td>‘Hands on’ practical experience</td>
<td>Gaining FNA numbers</td>
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<tr>
<td>Different preparations and techniques</td>
<td>Maintaining histopathology skills</td>
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<tr>
<td>Managing small volume samples</td>
<td>No peer group support to compare progress</td>
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<td>Exposure to different work practices</td>
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# Stage D assessment pathways

<table>
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<tr>
<th>Histopathology</th>
<th>Cytopathology</th>
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<tr>
<td>1500 surgicals (dependent on specialist interest/complexity)</td>
<td>-</td>
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<tr>
<td>300 diagnostic cytology (suggested)</td>
<td>1000 diagnostic cytology</td>
</tr>
<tr>
<td>12 x WBPA</td>
<td>1000 gynae cytology</td>
</tr>
<tr>
<td>1 audit</td>
<td>18 x WBPA</td>
</tr>
<tr>
<td>Multisource feedback</td>
<td>1 audit</td>
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<tr>
<td>Training Logbook</td>
<td>Training Logbook</td>
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<tr>
<td>CCT in Histopathology</td>
<td>CCT in Histopathology &amp; Cytopathology</td>
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What could be improved?

- Collaboration with radiology for FNAs
  - Difficulty of FNA experience
  - Training of ultrasound-guided FNAs
    - more controversial
    - not on curriculum

- Access to molecular attachment
  - Now on new curriculum
Conclusion

• Excellent opportunity
  – Technical skills
  – Diagnostic proficiency
    • Managing cytological-histological discordance
    • Recognising sampling and diagnostic limitations
    • Correlating clinical & imaging data with ancillary testing to provide a robust diagnosis
    • Seeking senior consultation from others

• ….but a lot of work!
References

1. Curriculum for specialty training in histopathology. Royal College of Pathologists, June 2015
   https://www.rcpath.org/resourceLibrary/histopathology-curriculum--2015-.html

2. Curriculum for specialty training in histopathology. Royal College of Pathologists, June 2010
   https://www.rcpath.org/resourceLibrary/histopathology-curriculum---2010-.html