Extension of Biomedical Scientist Roles in Diagnostic Cytology

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Challenges in diagnostic cytology

- Making diagnostic cytology clinically relevant
- Centralisation of Cell Path labs
- Diagnostic cytology training for registrars
- Impact of HPV primary screening
- Low use of ancillary techniques e.g. molecular
- Loss of key Diagnostic cytology champions
- Move to specialist pathology reporting
- Clinical application not well understood by clinicians
What is current practice?

• We don’t really know!
• Many labs using Biomedical Scientists to report diagnostic cytology samples “under the radar” without appropriate qualifications and competency assessment
• We don’t even know how many labs are reporting diagnostic cytology!
What is current practice? (2)

- To discuss extended practice we need to know the baseline
- We do know it is variable
- Extended practice in one lab may be below current practice in others
- What do we mean by extended practice?
- Do we mean what is approved by the professional bodies?
- Possible role for BAC survey??
Advanced Practice?

“Advanced Clinical Practice is delivered by experienced registered healthcare practitioners. It is a level of practice characterised by a high level of autonomy and complex decision-making. This is underpinned by a masters level award or equivalent that encompasses the four pillars of clinical practice, management and leadership, education and research, with demonstration of core and area specific clinical competence”

John Clark, Director and Dean of Education and Quality – South, HEE
What is advanced Practice?

“Advanced Clinical Practice embodies the ability to manage complete clinical care in partnership with patients/carers. It includes the analysis and synthesis of complex problems across a range of settings, enabling innovative solutions to enhance patient experience and improve outcomes”

Skills for health
Advantages of role extension

• Reduce the pressure on pathologists
• Expand the pool of staff who can report and thus increase resilience
• Allow pathologists to focus on complex specimens and MDT’s
• Produce cytology champions
• Adds clinical value to the pathways
Team working

• Not about replacing pathologists
• Not a takeover!
• A mutually supportive relationship
• Building the right team to get best clinical value for patients
• We need an open and honest discussion
• If we don’t do it now it will be crisis management (again)

British Association for Cytopathology
Extending roles in other professional groups

- Radiology
- Microbiology
- Biochemistry
- Colposcopy
- Endoscopy
- Nurse specialists/consultants
- Pharmacy
Ensuring clinical value

- We should not invent roles to justify our existence
- Numbers in training must be justified by workload
- Resources must be focussed on clinical value
- Attendance at ROSE or EBUS must be audited locally to demonstrate clinical benefit
- Other methods may work better (straight to preservative fluid)
Current agreed activities

- Reporting negative urines, serous fluids and respiratory samples with DEP
- Reporting abnormal urines, serous fluids and respiratory samples with ASD
- ROSE and EBUS adequacy assessment and opinion for triage (as per 2016 joint statement)
Potential role extensions

- EBUS final reporting
- Head & Neck FNA reporting
DEP in Non-gynae

- Cumulative Results (Feb 2004 – June 2017)
- Fourteen sessions had been offered with a total of 100 entries from 78 candidates, 43 of whom had been successful, 34 on the first attempt. The overall pass rate is 55.1%.
ASD in Non-gynae

• Cumulative Results (June 2015 – June 2017)

• Three sessions have been offered with a total of 6 entries from 4 candidates of whom 3 have been successful, on their first attempt. **The overall pass rate is 75%.**
ASD in cervical cytology

- Cumulative Results (Nov 2001 – June 2017)
- 40 sessions have been offered with a total of 317 entries from 174 candidates of whom 100 have been successful, 62 on the first attempt. The overall pass rate is 57.5%.
Barriers to extending the role

- Professional resistance
- Lack of pathologists to mentor staff
- Who takes clinical responsibility (doesn’t) appear to be an issue in radiology
- Numbers of interested Biomedical Scientists
Other role extension options?

- Molecular pathology (often centralised)
- FISH, CISH
- Related Histopathology pre-screen
- FNA reporting
- Joint Fluids
- Flow Cytometry
- Other diagnostic cytology samples
Planning for role extension

• The most effective cytology services are where medical staff and Biomedical Scientists work in partnership. Fighting between professional groups only weakens the discipline as a whole.

• Saying no just because we say so is no longer justifiable; but neither is demanding it simply because we want it or are currently doing it.

• The best examples of integrating Biomedical Scientists into extended roles are where these are clearly planned and structured and there is clear evidence of value.

• It is essential that practice is changed in a structured way with the support of professional bodies.
Not all doom and gloom!

- Royal Cornwall Hospital
- Antrim
- Ashford & St Peter’s
- St Georges
- BAC tutorials
- USA model
- European roles
How do we train in extended roles?

- Competency based Portfolio approach
- IBMS/RCPath role
- Mentor role
- Training school role
- Get out the lab!
- Audit and then audit again
- Digital pathology and on line courses
- University courses (like radiology)
Portfolio approach

The aim of a professional portfolio is:

• To provide evidence of the development of personal and professional standards
• To facilitate critical evaluation
• To encourage reflective practice, leading to the development of standards for a framework of progress,
• To maintain and develop professional knowledge and competence.
Audit is vital!

- Audit is the main method of demonstrating competence
- Record everything!
- Audit is difficult in some sample types e.g. urine cytology
How do we ensure role extension is clinically safe?

- Do it the same way as pathologists?
- But could we do it better?
- The current gynae ASD is almost certainly at a higher level than current pathologist training in cervical cytology
- Competency based Portfolio to a nationally agreed standard
- Limits of practice
ROSE and EBUS

• Biomedical Scientists attend FNA and EBUS clinics in many labs in the UK
• Their role is variable but usually includes adequacy assessment and advice on repeat samples
• Reduces pressure on pathologists (NZ model)
• Reduces pathologist travelling to multiple sites following centralisation of services
Joint position paper

The joint position paper (April 2016) of the RCPath, IBMS and BAC acknowledges and promotes diagnostic cytology reporting by biomedical scientists but, in addition, contains the sentence:

“The reporting of fine needle aspiration cytology is not considered appropriate for biomedical scientists.”
The joint position paper also contains a section which acknowledges Rapid Onsite Evaluation (ROSE) as follows:

"Certain NGC samples are taken by specific clinical procedures (e.g. EBUS, FNA of many sites) by clinical teams or by Pathologists. An opinion as to sample adequacy and sometimes a diagnosis can be offered by a Pathologist at the time the sample is taken. In most settings though, resources do not allow for this. A comment on sample adequacy (Rapid on-site evaluation – ROSE) may be offered by a biomedical scientist. If the biomedical scientist has suitable experience based on competency and service needs and appropriate training/qualifications they may also be able to offer a preliminary opinion mainly for triage of the sample material rather than for patient management as well as ROSE."

British Association for Cytopathology
Specimen triage at ROSE clinics

It is not known exactly how many BMSs are carrying out ROSE at various body sites and for what reasons, though the majority of the latter are likely to be for adequacy alone, rather than preliminary opinion and triage. Nonetheless, those BMSs that are providing specimen triage are effectively assessing FNAs obtained by EBUS and placing them into diagnostic categories.
Final Reporting of EBUS FNAs by Biomedical Scientists

• A discussion paper was received by the CJB in October
• The paper set a series of questions for the CJB to discuss and respond:

• Is there a current and future need for non-medical reporting of EBUS FNAs?
  – Yes
Final Reporting of EBUS FNAs by Biomedical Scientists

• Is it the Conjoint Board’s view that it is reasonable and safe for biomedical scientists, appropriately qualified, experienced and competency-assessed, to issue the final report on EBUS FNAs?
  – Yes
Final Reporting of EBUS FNAs by Biomedical Scientists

- Should the appropriate prior qualification be the ASD in non-gynaecological cytology?
- The Board agreed YES as the ASD in non-gynaecological cytology takes into account clinical context during the setting and marking of the examination.
- Clinical knowledge and information must be assessed.
Final Reporting of EBUS FNAs by Biomedical Scientists

• It must be emphasised clearly that a candidate would be expected to attend MDTs, directly affect patient management and attend correlation meetings.

• It was agreed that Radiology reporting is a precedent as an example.
Final Reporting of EBUS FNAs by Biomedical Scientists

• Should this additional role be subject to further examination, possibly as a module at ASD level?

• The Board agreed that the competence should be measured via a portfolio based approach through supervision at a medical level.

• A prerequisite for portfolio submission would be attainment of the ASD in non-gynaecological cytology as EBUS reporting would be an expansion of those skills.
What happened next?

• Slow process
• A symptom of over-commitment of senior staff due to workforce shortages, backlogs and the move to HPV
• Actions from the last CJB have yet to be completed
• Principle of portfolio agreed by IBMS
The next steps....

• Determining a standardised training programme
• Agreeing a competency based portfolio
• Agreeing the scope and content of the competency assessment
• Agreeing a mentoring process
• Approval by the professional bodies
• To be discussed by CJB members at the next exam at the end of June
Summary

• EBUS reporting by Biomedical Scientists will become a reality
• ASD will be a prerequisite
• Apologies for the delay
• It will be a competency based portfolio
• No additional exam
• Result of close collaboration between IBMS and RCPath
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