The Journey of an advanced practitioner in reporting gynaepathology

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BACKGROUND

- **My journey into the world of Gynaecological pathology began 6 years ago as a Biomedical Scientist at UCLH.**
- **This innovative training pathway was created for a cohort of senior scientists to provide efficient patient care and was based on an adapted curriculum that was designed for medical trainees.**

DETAILS OF METHODS EMPLOYED FOR THE SUCCESS OF THE TRAINING PROGRAM

My Curriculum vitae which outlined qualifications and experience and my Personal Statement were handed to the Conjoint board for approval .

A letter of approval by my departmental management and clinical head was attached.

A named clinical supervisor (Dr.Rupali Arora) and her letter of support was also required.

Once approved, I faced an Interview held by representatives of conjoint board and carried out a spot presentation.

Once successful, my then clinical supervisor accompanied me for the induction day.

1. *Year 1: Portfolio of min 750 cases, DOPS, CBD,ECE, Audit, Educational case report.
   *Competence will be formally assessed after one year using the Objective Structured Pathology Examination (OSPE) format.
2. *Year 2: Portfolio of min 1250 cases, DOPS, CBD,ECE, Audit, Educational case report.
3. *Year 3: Portfolio of min 1250 cases, DOPS, CBD,ECE, Audit, Educational case report.
   Exam set at a standard similar to the FRCPath part II

THE TRAINING PROGRAM STAGES A-C

- **The carefully crafted BMS curriculum and assessment tools have lent its hands in shaping my reporting qualification.**
- **I needed to rigorously follow the training program set out by the conjoint board, showing evidences along the way**

Logistics of Learning to Report:

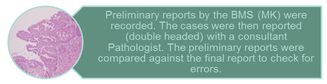
- **My Consultant histopathologist supervisors Dr. Rupali Arora and Dr.Laura Casey devised a program for my training at UCLH and BHRUT respectively.**

THE TRAINING PROGRAM: STAGES A-C

SUMMARY OF CRITERIA	• STAGE A (2015-2017)	• STAGE B (2017-2018)	• STAGE C (2019-20)
REPORTED CASES: NUMBERS	REQUIREMENT 750 CASES MY CASE NUMBER 2500 (UCLH AND BHRUT). I needed to re-take my exams and hence spent more time on stage A	REQUIREMENT 1000 CASES MY CASE NUMBER 2000 (BHRUT)	REQUIREMENT 1000 CASES MY CASE NUMBER 1000 (BHRUT)
CASE LOAD MIX	BENIGN –MALIGNANT BIOPSIES. BENIGN –MALIGNANT EXCISIONS. MOSTLY BENIGN AND SOME MALIGNANT RESECTIONS.	BENIGN –MALIGNANT BIOPSIES. BENIGN –MALIGNANT EXCISIONS. MOSTLY BENIGN AND FAIR AMOUNT OF MALIGNANT RESECTIONS.	BENIGN –MALIGNANT BIOPSIES. BENIGN –MALIGNANT EXCISIONS. MOSTLY BENIGN AND FAIR AMOUNT OF MALIGNANT RESECTIONS.
AUDITS	1. Adequacy of training and reporting of gynaecological cases in year 1 (UCLH) 2. Adequacy of the macroscopic account (UCLH). 3. Adequacy of Microscopic reporting of gynaecological cases in year 1 of RCPath pilot study, BMS reporting (please see tables, diagrams and summary).UCLH	1. Minimum number of histopathology blocks required to confidentially diagnose products of conceptions (BHRUT). 2. **Audit: MMR Testing in Endometrial Cancer by Dr. Laura Casey) (took part in diagnosis and requesting MMR tests promptly.**	• Comparison of gynaecological cancer diagnosis at our hospital (including cases I diagnosed) and the central review centre (BHRUT).
PRESENTATIONS	I presented the above audits at UCLH. Neoplasia in a cervical excision	1. Training and discussions of mislabelling errors and non-conformances. 2. The importance of cervical biopsy orientation and its impacts on histopathology diagnosis. 3. Combining Macroscopic and microscopic features to derive a diagnosis of products of conception. 4. My role as an Advanced Clinical Practitioner/Clinical Scientist	• 1. My part in leading an important and innovative change in my specialism (Gynaecology) with respect to the introduction of new investigative tests (MMR) and procedures.
CASE STUDIES	• Leiomyoma • Neoplasia in a cervical excision • Educational case report • Uterine rupture and hysterectomy due to placenta praevia	• Mucinous type adenocarcinoma of the sigmoid colon metastatic to the right ovary. • **Endometrioid Endometrial Carcinoma**	High grade serous carcinoma of the ovary
MDT ATTENDANCE	Numerous	Frequent at BHRUT and include MDT slide review meetings at RLH	Frequent at BHRUT and include MDT slide review meetings at RLH
ERROR LOGS AND EVIDENCE OF FORMATIVE ASSESSMENTS	Regularly logged and evidences produced.	Regularly logged and evidences produced.	Regularly logged and evidences produced.
ATTENDANCES TO COURSES	Carried out as much as possible and practical	Carried out as much as possible and practical	Carried out as much as possible and practical

- **First of many subsequent audits**
- I carried out an audit on 200 cases that I reported to observe if there is compliance with the Royal College of Pathologist guidelines for the dissection and reporting gynaecological cases (the baseline review of the categorisation of discrepancies in histopathology November 2008, audit by M.Kumanan and Dr. Rupali Arora 2015).
- On review the error rate was 18 % in the first quarter and 14 % in the second quarter , although these results were non critical. Consequent years showed that the discrepancies reduced to 6-7% and re-assured my supervisors and myself that the training was on par with the national requirement.

First 100 cases reported by the BMS were collected between October 2014 – December 2014 . These cases were compared to 100 cases reported in the period Jan 2015-March 2015.

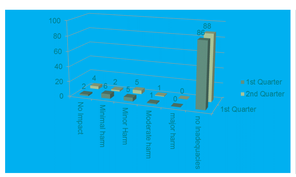


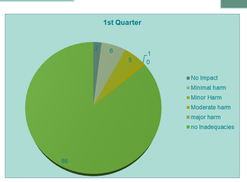
Preliminary reports by the BMS (MK) were recorded. The cases were then reported (double headed) with a consultant Pathologist. The preliminary reports were compared against the final report to check for errors.

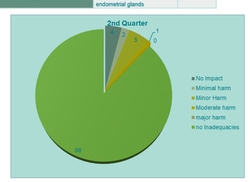
The errors were reviewed by the Advanced Practitioner and a Consultant Pathologist. Analysis of trends was noted.

MOST COMMON ERRORS

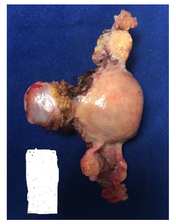
Discrepancy features By MK	Actual final diagnostic features, by the Consultant	Error category code / E1-E5
Hydrocoic mole	Normal will that were slightly dilated and	E2
Upstaging x CIN to one / two grades	Low grade CIN	E3
Downstaging CIN to one/ two grades	High grade CIN	E3
Not stating crypt involvement	CIN involving the crypts	E1
Stated scanty and suboptimal	Stripped superficial glands / Inactive endometrium	E1
CIN ectocervical margin involved	Margins are clear of CIN/ Review at the Colp meeting	E4
Ectocervix only	Transformation zone present (scanty glands were noted)	E1
Denuded epithelium	CIN 2 present	E2
Squamous carcinoma	High grade CIN	E4
Pleomorphic cells present	Inflamed area with mild cytological atypia	E3
Simple cyst is present	Cystadenoma is present	E1
Haemorrhagic cyst present	Cystadenoma present	E1
Wurly changes are seen	Reactive changes only seen	E2
Hyperplasia in cervical polyp	Microglandular hyperplasia and squamous metaplasia in cervical polyp	E3
Hyperplasia in endometrium	Secretory endometrium	E4
Benign cervical polyp	Lower uterine polyp with some endometrial glands	E1



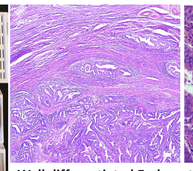


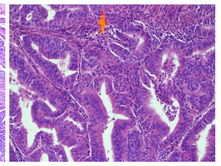


EXAMPLE OF A CASE STUDY: *ENDOMETRIOID ENDOMETRIAL ADENOCARCINOMA*



Show surface area, cut surface and blocks of hysterectomy specimen.





Well differentiated Endometrioid endometrial adenocarcinoma:
The biopsy results showed grade 1 endometrioid endometrial carcinoma composed of complex glandular architecture forming a cribriform with no intervening stroma. Both glandular atypia and cytological atypia were appreciated. The polypoid area showed benign lower uterine isthmic morphology with inactive glands.

- **Picture-1 Uterus, Cervix, Bilateral Adnexa and Endometrial Lesion**

MY CURRENT ROLE/ POTENTIAL BENEFITS OF A CLINICAL SCIENTIST

- **Dissection/Macroscopic analysis, including the most complex malignant cases (category D&E): Clinical Innovation.**
  (These duties were conventionally carried out by the medical colleagues who underwent specialist training).
- **Supervised histology reporting of gynaecological cases (Attending slide review meetings and MDTs): Clinical Innovation, linking scientific departments to clinical departments.**
- **Managing the histopathology dissection unit : Writing SOPs, putting procedures in place, managing turn around time etc .**
- **Employing and training junior members of staff: Competency assessments and attending to their training needs.**

DISCUSSION AND FUTURE OF ENHANCED SCIENTIST TRAINING

- **Built on evidence based on previous successes, the BMS reporting qualification in mono-speciality generates considerable benefits to both the pathologist and BMS.**
- **Benefits in promoting and extending the BMS cut-up and reporting roles focused on team building, career progression, and efficient workload sharing.**
- **Ideally embedding these trainings through the Scientist Training Programme (STP) and Higher Specialist Scientist Training (HSST) which are programs that exist for other specialities and are funded and supported by the Health Education England (HEE) could generate further benefit enhancements.**
- **There is little evidence of any detrimental effect to patient care. Using the examples from previous studies show that, appropriately trained and supervised BMS are more than capable of achieving published national performance guidelines for specimen dissection and reporting and in joining force with pathologists within the department.**
- **Together they can face the future challenges faced by histopathology.**