

<p>Title: Cytology Laboratory User Handbook KCH</p> <p>Subject: Organisation and Management</p>

Version number 1.1

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1. Introduction

1.1 Purpose

This handbook is intended to serve as a user guide to the services available from the Cytology Laboratory based at Kings College Hospital. It is aimed for use by all staff groups involved with requesting Cytological investigations.

1.2 About Us

Viapath Analytics KCH diagnostic cytopathology laboratory is UKAS (United Kingdom Accreditation Service) accredited medical laboratory (No. 9705); accredited to ISO15189:2012 for the scope described in the UKAS Schedule of Accreditation which can be found on the UKAS web-site: <https://www.ukas.com/browse-ukas-accredited-organisations/>.

Users of the Cytopathology service should refer to the UKAS schedule of accreditation on the UKAS website, for a list of currently accredited tests.

The laboratory technical service and staff are managed by the Viapath Analytics Cytology Service based at St Thomas' Hospital. All test results are reported by KCH Consultant Pathologists.

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We report approximately 3500 samples per annum and provide a comprehensive service, reporting on a wide range of samples including serous fluids, urine, cerebrospinal fluid, respiratory samples and fine needle aspirations (FNAs).

We consistently produce high quality preparations using a combination of conventional methods and automated thin prep technology.

The department supports a comprehensive FNA service at King's College Hospital. Pathologists and senior BMS staff attend clinics, ward, intra-operative and image guided FNA's to assess adequacy, provide on-site interim diagnosis and ensure enough material is collected for ancillary testing like microbiology, immunocytochemistry, flow cytometry and cytogenetics. This approach allows for a rapid, confident, and complete diagnosis reducing the need for a surgical biopsy in many cases and shortening the overall diagnostic pathway of the patient.

There is also a wealth of experience amongst consultants who attend regular MDMs and are involved with teaching, workshops, and CPD activities.

The clinical aspects of the service are led by the KCH Consultant Pathologists (see Section 2.6).

There is also an equally committed and qualified group of MLAs that form the heart of the preparation laboratory.

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2. CONTACT US

The diagnostic cytology service at Kings College Hospital is located on the second floor of the Bessemer Wing.

2.1 Contact address

Cytology Department
2nd Floor, Bessemer Wing
Kings College Hospital
Denmark Hill
SE5 9RS

2.2 Telephone enquiries

Cytology Enquiries Tel 0203 299 9000 ext 34035

2.3 Hours of opening

The department is open from 09:00 – 17:15, Monday to Friday (except bank holidays).

2.4 Clinical advice and interpretation

Phone the general enquiries number and the staff will put you through to the Consultant Pathologist reporting the case you require.

General Cytology Enquiries Tel 0203 299 9000 ext. 34035

2.5 Staff contact details

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Head of Clinical Service for Cellular Pathology and Cytology Clinical Lead

Dr Mark Howard Ext 36169

2.6 Consultants and Specialities

Consultants	Speciality	Extension
Dr Mark Howard	Gastrointestinal, Non-Gynae Cytology, Lung	36169
Dr Olivia McKinney	Lung, Non-Gynae Cytology, Gynaecology, Breast	31412
Dr Hizbullah Shaikh	Lung, Non-Gynae Cytology, Gastrointestinal, Gynaecology	31967
Dr Nuzhat Akbar	Gastrointestinal, Non-Gynae Cytology, Breast	33557
Dr Abdel Selim	Skin, Gynaecology, Non-Gynae Cytology	33605

2.7 Section Leads

2.7.1 Service Delivery Manager

KCH: Khadijah Owusu-Ansah khadijah.owusu-ansah@nhs.net

0203 299 3042

STH: Toby Hunt toby.hunt@viapath.org

0207 188 2955

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2.7.2 Operations Managers

Cytology: Monica Idika, monica.idika@viapath.org 0207 188 2911

2.7.3 Quality Manager

Janet Okafor janet.okafor@nhs.net 0203 299 4610

Ext: 34610

2.8 Complaints

Complaints may be made directly to the department, via PALS or via Viapath Customer Support. Complaints are handled according to the Viapath Complaints Policy and Procedure located at <http://www.viapath.co.uk/customer-service>.

2.9 Protection of patient information

All patient information is handled under the terms of the Data Protection Act 2018. All personal information received by Viapath is dealt with according to the Viapath Privacy, Data Protection & Cookie Policy which is available at <http://www.viapath.co.uk/privacy-policy>.

3. Non-Gynaecological Cytology

The staff in the laboratory are available to advise on any aspect of sample collection.

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3.1 Type of samples

- Amniotic fluid, Bile fluid, Breast cyst fluid, Cyst fluid, Endometrial washings, Epididymal cyst fluid, Gastric lavage/washings, Hydrocoele fluid, Mediastinal cyst fluid, Ovarian cyst fluid, Pericardial fluid, Pleural fluid, Peritoneal fluid (ascitic fluid), Peritoneal washings, Renal cyst fluid, Synovial fluid, Thyroid cyst fluid, Miscellaneous fluid
- Urine (Mid-stream Urine, fully voided urine, ureter washings, urethral washings, catheterised urine, Ileal conduit)
- Brushings (Bronchial, gastric, oesophageal, duodenal etc.)
- Skin Scrapings
- Imprints
- Cerebrospinal fluid (CSF)
- Fine Needle Aspiration Biopsies
- Broncho alveolar lavage (BAL)
- Bronchial Washing
- Sputum

3.2 Turnaround Time

Routine-The turnaround time for non-gynae reporting is between 7 working days but this will vary depending on the specimen type and if additional clinical information or ancillary tests are required e.g. immunocytochemistry, flow cytometry, FISH or molecular studies.

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FNA specimens received in the laboratory will be reported within 7 working days.

Urgent - Specimens marked as '**URGENT**' will be reported within 48 hours after receipt by the laboratory. However, this may only be a provisional report pending further ancillary tests.

It is recommended that the requesting clinician discusses any such urgent specimens in advance with the Cytopathologist. To discuss, please phone the Cytopathology Department on Ext 34035. Failure to discuss may make it impossible to achieve the stated 48 hours turnaround time.

Please ensure that appropriate contact details are documented on all cytology request forms.

3.3 Specimen Acceptance Criteria

Request form: All Cytology specimens must be accompanied by a request form or be labelled with an EPR label to allow printing of request form through EPR. The date and time of collection of the sample is printed on the EPR label.

The patient's details on the request form and specimen container/slide must match and include:

- (i) Patient's First name and Surname.
- (ii) Hospital Number
- (iii) Date of Birth.

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(Some samples are identified by a code, for example, samples from the GUM Clinic. In such cases the unique identifier will replace the need for patient's first name and surname. The date of birth should still be used).

The details of the Requesting practitioner (name of the doctor printed legibly and the contact number), Location to return the results and Speciality should be included in the request form. For samples from the Primary Care, please include the address of the GP surgery. Telephone number should be included in case we need to contact the practice. Indicating the type of specimen is important as related clinical advice could vary.

Specimen collection dates and times must be stated.

All relevant clinical information must be included. Clinical details on the request form should be adequate to convey information of the suspected hazard to the staff who handles the specimens. Without clinical information some tests will not be performed.

3.4 Package and transport of samples

All non-gynaecological samples must be transported to:

**Viapath Central Specimen Reception,
Ground Floor, Bessemer Wing,
Kings College Hospital**

OR

Delivered to the Cytology laboratory as soon as possible to minimise the cell deterioration and keep the turnaround times to a minimum.

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The sample and the request form must be placed in a plastic 'biohazard' Kangaroo bag ensuring that the form and sample are in separate sections of the bag. This will prevent contamination of the request form if the sample container leaks

3.5 Results

Non-gynae results are available on EPR and in the time frames as stated above.

To discuss a cytology report with a consultant Cytopathologist, contact the department between 9.00 and 5.00 pm on 0203299 9000 ext. 34035

3.6 Serous Fluids and all other drained fluids

3.6.1 Specimen collection

Fresh samples should be sent to the laboratory in clean sterile containers with screw top. The sample should be delivered as soon as possible to minimize the cell deterioration. If there is a delay in delivering the sample to the laboratory, the sample should be stored in fridge 2-8°C.

3.6.2 Sample Requirement

Volume

A sample of 20ml maximum size is adequate for cytology in almost all cases. **Larger volumes should not be sent to the laboratory without prior approval from the laboratory.**

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Specimen Container



All fluids should be sent in a standard universal container and sent unfixed to the lab.

Request form

All samples must be accompanied by a correctly filled request form with all patient's clinical details and sender's information including contact details. **Please see section 3.3 above.**

Specimen Transport

Specimens should be transported to the laboratory as soon as possible after collection.

3.6.3 Interferences

- Failure to refrigerate sample may result in poorly preserved specimen

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- Cells in fluids that are heavily blood-stained may degenerate very quickly
- Incorrectly labelled samples or incomplete request forms will delay the processing of the sample and impact on patient management, however the department endeavours to process all samples if possible

3.7 Cerebrospinal fluid

3.7.1 Specimen collection

Fresh samples should be sent to the laboratory in clean sterile containers with screw top. CSF samples degenerate quickly. Thus, the sample should be delivered as soon as possible.

Samples collected/received out of hours, must be stored in the refrigerator at 2-8°C.

3.7.2 Sample Requirement

(i) Volume

Low volume and smaller samples are acceptable for CSF.

(ii) Specimen Container

All fluids sent in a standard universal container and sent unfixed to the lab.

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(iii) Request form

All samples must be accompanied by a correctly filled request form with all patient's clinical details and sender's information including contact details. **Please see section 3.3 above.**

3.7.3 Specimen Transport

Specimens should be transported to the laboratory as soon as possible after collection.

3.8 Brushings

Bronchial brushings, Biliary Brushings and any material obtained by brushing

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3.8.1 Specimen collection

Sample obtained is spread along the length of the slide and immediately fixed using an alcohol spray fixative to prevent air drying. The brush used must be washed in saline.

3.8.2 Sample Requirement:

The Slides prepared must be placed in a plastic slide mailer.

3.8.3 Specimen Handling

The slides (in a plastic slide mailer), washings (in a sterile universal container) and the request form must be placed in a plastic 'biohazard' bag ensuring that the form and sample are in separate sections of the bag. This will prevent contamination of the request form if the sample container leaks.

Store at 2-8°C until the sample is prepared.

Request form

All samples must be accompanied by a correctly filled request form with all patient's clinical details and sender's information including contact details. **Please see section 3.3 above.**

Specimen Transport

Specimens should be transported to the laboratory as soon as possible after collection.

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3.8.4 Interferences

- Failure to refrigerate sample may result in poorly preserved specimen
- Incorrectly labelled samples or incomplete request forms will delay the processing of the sample and impact on patient management, however the department endeavours to process all samples if possible.

3.9 Respiratory Tract samples

Sputum, Bronchoalveolar lavage, Bronchial washings etc.

3.9.1 Specimen collection

Fresh samples should be sent to the laboratory in clean sterile containers with screw top. The sample should be delivered as soon as possible to minimize the cell deterioration. If there is a delay in delivering the sample to the laboratory, the sample should be stored in the fridge at 2-8°C.

3.9.2 Sample Requirement

Volume

A sample of 20ml maximum size is adequate for cytology in almost all cases.

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Specimen Container

All fluids should be sent unfixed to the laboratory in a standard universal container.



Request form

All samples must be accompanied by a correctly filled request form with all patient's clinical details and sender's information including contact details. **Please see section 3.3 above.**

3.9.3 Specimen Transport

Specimens should be transported to the laboratory as soon as possible after collection.

3.9.4 Interferences

- Failure to refrigerate sample may result in poorly preserved specimen

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- Cells in fluids that are heavily blood-stained may degenerate very quickly
- Incorrectly labelled samples or incomplete request forms will delay the processing of the sample and impact on patient management, however the department endeavours to process all samples if possible

3.10 Urinary Tract Samples

3.10.1 Specimen collection

Fresh samples should be sent to the laboratory in clean sterile containers with screw top. The sample should be delivered as soon as possible to minimize the cell deterioration. If there is a delay in delivering the sample to the laboratory, the sample should be stored in fridge at 2-8°C.

3.10.2 Sample Requirement

Volume

A sample of 20ml maximum size is adequate for cytology in almost all cases. **Larger volumes should not be sent to the laboratory without prior approval from the laboratory.**

Second voided urine sample of the day is considered as the adequate sample.

Specimen Container

All fluids should be collected in a standard universal container and sent unfixed to the lab.

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Request form

All samples must be accompanied by a correctly filled request form with all patient's clinical details and sender's information including contact details. **Please see section 3.3 above.**



3.10.3 Specimen Transport

Specimens should be transported to the laboratory as soon as possible after collection.

3.10.4 Interferences

- Failure to refrigerate sample may result in poorly preserved specimen
- Cells in fluids that are heavily blood-stained may degenerate very quickly
- Incorrectly labelled samples or incomplete request forms will delay the processing of the sample and impact on patient

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management, however the department endeavours to process all samples if possible

3.11 Fine Needle Aspiration

Any material obtained by aspiration.

3.11.1 Specimen collection

Material aspirated is spread along the length of the slides using another slide. Half of the slides prepared are immediately fixed using an alcohol spray fixative to prevent air drying, while the others are rapidly air dried.

The needle is then rinsed (washings) in a pot containing saline preferably balanced salt solution. The Washings (in a universal sample container) and slides (in a plastic slide mailer) should be sent to the laboratory.

3.11.2 Sample Requirement

The Slides must be placed in a plastic slide mailer while the washings must be collected in sample sterile universal pot containing saline or balanced salt solution.

3.11.3 Request Form

All samples must be accompanied by a correctly filled request form with all patient's clinical details and sender's information including contact details. **Please see section 3.3 above.**

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3.11.4 Specimen Acceptance

The slides, the pots containing washings and request form must have at least 3 of the following Identifiers and there should be no discrepancy between the form and specimen pot:

- (i) First name & Surname
- (ii) Date of Birth
- (iii) Hospital number

3.11.5 Specimen Handling

The Washings, slides (in plastic slide mailer) and the request form must be placed in a plastic 'biohazard' kangaroo bag ensuring that the form and sample are in separate sections of the bag. This will prevent contamination of the request form if the sample container leaks.

Store at 2-8°C until the sample is prepared.

3.11.6 Specimen Transport

Specimens should be transported to the laboratory as soon as possible after collection.

3.11.7 Interferences

- Failure to refrigerate sample may result in poorly preserved specimen.
- Failure to rapidly fix slides may result in poor cellular presentation and difficulty in interpretation.

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- Incorrectly labelled samples or incomplete request forms will delay the processing of the sample and impact on patient management, however the department endeavours to process all samples if possible.

3.12 Fine Needle Aspiration (FNA) clinics

Fine needle aspiration is a reliable method and initial choice of determining the nature of lumps and bumps. This involves aspirating a lump using a fine needle and then testing the material obtained. It is very safe and minimally invasive procedure for the diagnosis and further management.

The department supports a comprehensive FNA service at King's College Hospital. Pathologists and senior BMS staff attend clinics, wards, intra-operative and image guided FNA's to assess adequacy, provide on-site interim diagnosis and ensure enough material is collected for ancillary testing like microbiology, immunocytochemistry, flow cytometry and cytogenetics.

On Mondays the Radiology Department at Kings perform Ultrasound guided Fine Needle Aspirations from Thyroid nodules. The Cytology BMS attend the Thyroid FNA clinic at Radiology and perform on-site adequacy check for the samples aspirated.

On Tuesdays, the Dental Radiology provide one stop clinic where a diagnosis/provisional diagnosis is determined while the patient is in clinic. This clinic is attended by the Cytopathologists with BMS

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assistance. This allows material to be collected in one setting for ancillary testing (microbiology, cell blocks and molecular diagnostics).

King's College Hospital Cytology BMS support the following FNA clinics

Day	Clinic	Time
Monday	Radiology, 2nd Floor, Denmark Wing	2:00 – 16:00
Tuesday	Head and Neck Radiology, Dental Institute, Ground Floor,	9:45 – 13:00

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