OPHTHALMIC HISTOPATHOLOGY SERVICE USER GUIDE

Department of Cellular Pathology
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1. Department overview

1.1. Ophthalmic pathology forms part of Adult Histopathology and provides a diagnostic service in ophthalmic histopathology and cytopathology. It is one of 4 laboratories within England making up the National Specialist Ophthalmic Pathology Service (NSOPS).

1.2. NSOPS laboratories were commissioned by the National Commissioning Group (now the Advisory Group for National Specialised Services) and are centrally funded. This means that NHS cases submitted to NSOPS laboratories for examination are seen without charge to the referring clinician for patients in England.

1.3. The laboratory aims to provide a high quality and timely service with provision of expertise in diagnosis using an appropriate range of techniques including histology, cytology, immunofluorescence, immunohistochemistry, and electron microscopy.

1.4. The department consists of two consultant histopathologists (one full-time and one part-time), an ophthalmic lead biomedical scientist and a clerical staff member.

1.5. The department is committed to the safe and secure handling and disposal of confidential information and accurately reporting results of investigations in a timely, confidential and clinically useful manner.

1.6. Material may be submitted elsewhere for techniques not performed within the department, such as PCR studies/ molecular studies.

1.7. The department does not arrange or provide the following diagnostic laboratory services: microbiology, virology, immunology, haematology, biochemistry, or advice on control of infection.

2. How to contact us

Ophthalmic pathology forms part of Adult Histopathology, Clinical Sciences Building 1(CSB1)

2.1. Postal address
For correspondence and specimens:
Adult histopathology
1st floor Clinical sciences building 1
Central Manchester University Hospitals NHS Foundation Trust
Oxford Road
Manchester
M13 9WL

2.2. Laboratory Opening Times:
08.00 – 17.00 hours
Monday - Friday, excluding Public/Bank Holidays (England)
NB: There is no out of hours or weekend service.
2.3. Key Contacts

**Fax No:** 0161 276 8808

**General Enquiries:**

**Specimen Reception:**
(Inc. Frozen section requests)
Tel: 0161 276 8808
Fax: 0161 276 8808

**Histology Reports:**
Tel: 0161 701 1615
Fax: 0161 276 6348

Jean Schofield
Secretary to Dr R Bonshek / Dr L Irion
**Tel:** 0161 276 6924
**Email:** jean.schofield@cmft.nhs.uk

**Technical Enquiries:**
Mrs Anita lee-jones
Lead BMS Ophthalmic pathology
**Tel:** 0161 276 6449 / 4202
**Email:** anita.lee-jones@cmft.nhs.uk

**Clinical Enquiries:**

Dr Luciane Irion
Consultant Ophthalmic Pathologist
**Tel:** 0161 276 6924
**Email:** luciane.irion@cmft.nhs.uk

Dr R Bonshek
Consultant Ophthalmic Pathologist
**Tel:** 0161 276 5568 / 4202
**Email:** richard.bonshek@cmft.nhs.uk

3. HISTOPATHOLOGY: INVESTIGATIONS AVAILABLE AND SPECIMEN REQUIREMENTS

3.1. Routine Histopathology

3.1.1. Histopathological examination of biopsy material, either diagnostic or excisional, of any tissue from the eye or its adnexal structures is available.

3.1.2. Guidance on which specimens should be submitted for examination may be found at:
3.1.3. The choice of methodology and appropriateness of the investigation are at the discretion of the consultant pathologist who is guided by details on the clinical request form and knowledge of laboratory methods and current "best practice".

3.1.4. Ophthalmologists are free to discuss the methods employed for any given specimen, but the final decision remains a remit of the clinical pathologist.

3.2. Fast Paraffin Processing

3.2.1. In urgent cases (often eyelid tumour surgery where a lesion is being excised, and subsequent reconstruction depends on knowledge of whether the margins are tumour free) a “fast paraffin” approach may be considered.

3.2.2. If the specimen can be delivered to the laboratory on the morning of the initial surgery, it can be processed overnight and an opinion will be available by midday on the next working day.

3.2.3. NB: This service is labour-intensive and must be booked in advance by contacting laboratory staff in advance to ensure both technical and clinical staff are available. This service is only available to CMFT ophthalmologists.

3.3. Unfixed Specimens

3.3.1. Unfixed histology specimens may be sent for frozen section if other forms of rapid diagnosis are not appropriate. This service is only available to CMFT ophthalmologists.

Every attempt will be made to provide a frozen section service during working hours. Users are requested to adhere to the following requisites:

Requests for frozen sections should be booked 24 hours in advance wherever possible. Bookings can be made by contacting the Laboratory on 0161 276 8808. Patient information, clinical information, Clinician’s name and the theatre number where the surgery will be taking place will be required at this time.

Frozen sections WILL NOT be undertaken on high-risk specimens. Such information MUST be disclosed to the Laboratory and included on the request card.

The sample MUST be accompanied by a completed request card which must clearly indicate the contact number and name of the person to whom the result is to be conveyed.

Before sending the sample ring 68808 to warn the laboratory it is on the way.

Samples for frozen sections should be transported to the Laboratory in an appropriately labelled dry pot and handed directly to the technical staff as quickly as possible and arrive by 4.30pm.

3.4. Histopathology Specimen Requirements

3.4.1. Histology specimens should be submitted in an appropriately sized leak-proof container containing standard tissue fixative (10% formalin).

NB: In cases where sebaceous carcinoma is suspected specimens should still be submitted in formalin.
3.4.2. Conjunctival biopsies for immunofluorescence should be placed directly into transport medium. It is extremely important these specimens are NOT placed in formalin as the technique cannot be carried out on fixed tissue. The sample in transport medium should also be labelled with relevant patient identification details. Gel tubes are available from Adult Histopathology Specimen Reception 0161 276 8808. Immunofluorescence is not available on high risk specimens.

3.5. Urgent Specimens
3.5.1. It should be indicated on the request form if the specimen requires urgent attention.

3.5.2. It is recommended that specimens deemed to be urgent are received by the laboratory as early in the day as practicable and before 1500h.

3.5.3. If a report is required by a particular date, this should be indicated on the request form. An attempt will be made to accommodate these requests, but a final report by a particular date cannot be guaranteed.

CYTOLOGY:
INVESTIGATIONS AVAILABLE AND SPECIMEN REQUIREMENTS

4.1. Cytology Investigations

4.1.1. Cytology is the investigation of small samples of dispersed or dissociated cells and other tissue components devoid of natural tissue architecture.

4.1.2. Specimens for cytological investigations include surface impression cytology and cytology of fluid such as tears, aqueous, vitreous, or fluid from cystic lesions.

4.1.3. Cytological investigation provides a preliminary diagnostic impression and should not be regarded as providing a definitive diagnosis.

4.1.4. The practice of cytology is difficult and if there is uncertainty about its use in a particular case, it is preferable to discuss the case with the consultant pathologist prior to obtaining the specimen.

4.2. Cytology Specimen Requirements
4.2.1. Impression cytology discs should be submitted in a pot containing formalin in a manner similar to histology specimens.

4.2.2. Vitrectomy specimens: We prefer to receive a formal pars plana vitrectomy in a cassette or bag. If samples are required for microbiology, virology or PCR etc please remove these from the cassette/bag first. These samples need to be fixed in an equal volume of 10% neutral buffered formalin.

4.2.3. Small volume cytology specimens: the syringe used in the collection of the sample may be submitted with the fluid inside. Needles must be removed and the syringe capped. The specimen should be fixed using an equal volume of 10% formalin drawn up into the same syringe. Indication should be made on the request form as to whether the specimen is fixed or not.

Please do not send unfixed specimens from outside hospitals unless by same day courier.
4.2.4. If microbiological investigation is required, the requesting clinician must submit a separate specimen to an appropriate microbiology service. It is not possible for this laboratory to split a specimen under sterile conditions.

5. HOW TO SUBMIT SPECIMENS FOR INVESTIGATION

5.1. Request Forms and Sample Labelling

5.1.1. For all specimens submitted to the laboratory, a fully completed request form MUST accompany each case.

5.1.2. You may use request forms provided by this department or by your own local histopathology department, as long as it is suitable for histopathology or cytology specimens.

5.1.3. Request forms are designed to provide:

- unique identification of the patient.
- a destination for the report and any charging information.
- the laboratory with the clinician contact details if discussion of the case is required.
- date and time of specimen collection/removal and investigations required (e.g., histology/cytology).
- type of specimen and anatomical site of origin
- clinical information so that the pathologist may handle the specimen appropriately and interpret microscopic findings in the proper context.
- an awareness of any health and safety issues with a given specimen.
- an indication if consent has been provided for research purposes.

5.1.4. With this in mind, please provide complete information on the request form. Failure to adequately complete any portion of a request form may lead to dangerous errors, the responsibility for which will lie with the referring ophthalmologist.

5.1.5. **NB: The patient’s NHS number** should be stated (when applicable), as this provides a unique identifier, together with patient’s first and last names, date of birth, gender, hospital number (if appropriate). Patient address is also required for cases originating outside of CMFT.

5.1.6. Each specimen container, no matter how small, must also be labelled with the appropriate patient identification data (minimum of 3 identifiers eg first and last name, date of birth/age, gender and preferably patient’s NHS/Hospital No). The information must be consistent with the request form, to prevent errors in specimen and patient identification. Multiple specimens from the same patient should also identify the specimen type/site.
5.1.7. If there are discrepancies between the request form and specimen labelling, specimens in inadequately labelled containers or accompanied by inadequately completed request forms; the requesting clinician will be required to complete the documentation by visiting the laboratory or the specimen may be returned to the referring clinician for proper completion, resulting in a delay in processing.

5.2. HIGH RISK/DANGER OF INFECTION SPECIMENS

5.2.1. It is the responsibility of the requesting clinician to indicate on the REQUEST FORM AND SPECIMEN if the patient is known or suspected to be within a “High Risk/Danger of Infection” category (eg HIV, TB, Hepatitis B, Hepatitis C), to facilitate appropriate handling.

Frozen sections (including specimens for immunofluoresence) will NOT be carried out on high risk specimens.

5.3. Specimen Containment

5.3.1. It is the responsibility of the referring clinical/surgical team to ensure that all specimens are submitted to the laboratory in suitable and approved containers.

5.3.2. Approved specimen containers have leak-proof lids and the appropriate hazard warning sign for the fixative eg formalin.

5.3.3. Ensure specimen containers are closed securely and placed inside a sealed specimen bag.

5.3.4. Specimens received leaking or damaged are a danger to all those who come into contact with them, including theatre staff, porters and laboratory staff.

5.3.5. Leakage from a specimen container may seriously compromise the diagnostic process. If a specimen is deemed unsuitable for safe processing by the laboratory staff, it will be disposed of and the requesting clinician informed of the problem as soon as is practicable.

6. SPECIMEN TRANSPORTATION TO THE LABORATORY

6.1. Mailed or Couriered Specimens

6.1.1. Specimens mailed or couriered should be packaged in approved containers and in accordance with the requirements of the delivery service. Hospitals more local to the department may make their own delivery arrangements via portering or delivery van services.

6.1.2. To confirm receipt of specimen(s) in the department, it is recommended that a ‘confirmation of receipt fax-back’ form, providing the senders confidential fax number, is enclosed with the specimen(s).

7. RECEIPT OF SPECIMENS IN THE LABORATORY

7.1. A specimen does not become the responsibility of the laboratory until it arrives at the specimen reception area within the department of adult histopathology on 1st floor CSB1.

7.2. Specimens should reach the laboratory before 1500h for processing that day (fixation allowing). Specimens received after 1500h may not be processed until the following working day.
7.3. It is therefore recommended that specimens deemed to be urgent, are delivered to the laboratory as early in the day as practicable and before 1500h.

7.4. On receipt, the request form and specimen are assigned a unique laboratory number which tracks the specimen throughout and is stated on the report.

8. REPORTS
The department aims to provide a timely as well as a high quality service.

8.1. Availability of Reports/Turnaround Times

8.1.1. Target turnaround times (from specimen receipt to availability of an authorised report) are as follows:

- Small specimens: 5 working days
- Large specimens: 7 working days
- Complex specimens: 14 working days

8.1.2. However, it is not always possible to have a final report available within the above stated times. Complex cases may require a sequential series of special investigations, and in the case of referrals from elsewhere, time may be spent awaiting submission of further diagnostic material at our request.

8.1.3. If a report is required by a particular date, this should be indicated on the request form. An attempt will be made to accommodate these requests, but a final report by a particular date cannot be guaranteed.

8.1.4. If a report is not received as expected please contact the lab as soon as possible on the contact details given above.

8.2. Clinical Advice and Interpretation

8.2.1. Advice to clinicians is readily available at all stages of the diagnostic process, from deciding what material to submit for examination to guidance on interpretation of the final report.

8.2.2. Please feel free to contact the consultant pathologist or the technical staff in the department for discussion of individual cases.

8.2.3. If discussing a report, please quote the Laboratory Number which appears on the report and uniquely identifies the patient and specimen.

8.3. Time Limits for Requesting Additional Examinations

Paraffin wax blocks are retained for a minimum of 20 years and stained slides are retained for a minimum of 10 years, should additional examinations be required.

9. USER SATISFACTION

9.1. It is our aim to continually provide, maintain and improve the services of our department so that they most suit the needs and requirements of our users and benefit patient care.
9.2. Feedback questionnaires are issued annually but, in the meantime, we appreciate any comments or suggestions that you consider would improve the quality of services provided. Feedback can be given using any of the contact details above.

10. NON-NHS SERVICES PROVIDED BY THE DEPARTMENT

10.1. Specimens from Private Patients

10.1.1. The department accepts specimens from private patients, for which a charge will be made to the referring clinician.

10.1.2. A scale of charges and invoicing registration form is available from the departmental secretary on request.

10.1.3. **NB:** If the correct status of the patient (ie NHS or private) is not correctly declared, the requesting clinician may face penalties.

10.1.4. **Internal users:** The request form accompanying such a specimen must clearly indicate that the specimen is from a private patient.

10.1.5. **External users:** A histopathology request form should be accompanied by a paper with the consulting room address (eg headed notepaper or a compliments slip) and including some reference (eg the patient's hospital number or initials) and requesting clinician’s signature.

10.1.6. Alternatively, you may wish to make your histopathology examination request in the form of a referral letter on headed notepaper with the requesting clinician’s signature.

10.2. Research

10.2.1. The ophthalmic pathology department is happy to actively support researchers.

10.2.2. Services can range from technical preparation of small numbers of slides to collaborative work with input from one or more consultant ophthalmic pathologists.

10.2.3. Please contact the department if you wish to discuss a project.

10.3. Training

10.3.1. Both ophthalmologists and histopathologists are welcome to spend time in the department if they wish to learn about ophthalmic pathology, either in preparation for examinations or in order to develop a subspecialist interest.

10.3.2. Please contact the laboratory if you wish to arrange a training placement.