

The Surgical Pathology Laboratory within the MGH Pathology Service processes over 85,000 specimens per year. The laboratory is staffed with seven Pathologist Assistants. Every specimen is grossed by subspecialty:

Surgical Pathology Subspecialties

- Bone and Soft Tissue Pathology
- Breast Pathology
- Cardiovascular Pathology
- Dermatopathology
- Head and Neck (ENT)
- Gastrointestinal Pathology
- Genitourinary Pathology
- Gynecologic Pathology
- Hematopathology
- Neuropathology
- Obstetric and Perinatal Pathology
- Pulmonary Pathology
- Renal Pathology
- Eye Pathology

Advanced Diagnostic Modalities

- Flow Cytometry
- Electron Microscopy
- Immunopathology
- Center for Integrated Diagnostics (Molecular Pathology)

All tissue removed from a patient in the course of an operation must be submitted for pathological examination. The following specimens need not be submitted to pathology for examination if no abnormality is suspected clinically. The nature, amount and disposition of the tissue must be recorded in the operative note.

1. Normal infant foreskin
2. Normal tissues removed from exposure of non-malignant organs (includes adipose tissue, cardiac atrial appendages)
3. Unused portions of veins removed for bypass operations
4. Uncomplicated pediatric hernia sacs
5. Normal skin and adipose tissue (or scar revision) removed on procedures performed for cosmetic purposes. **Please note: This does NOT apply to breast specimens. All skin and adipose tissue from breast specimens must always be sent to pathology.**

Any of the specimens listed above may be sent for pathologic examination at a surgeon's or other caregiver's discretion.

Any of the specimens listed above should be sent for pathologic examination if there are any clinically or radiologically unusual features or if the surgeon has any specific questions, i.e. with regard to the possibility of infection, tumor or a metabolic disorder or other unexpected findings

GROSS ONLY SPECIMENS:

The following specimens may receive gross description only. A careful gross description is dictated. All foreign bodies are photographed. The case is signed out by the appropriate staff:

1. Teeth
2. Foreign bodies
3. Calculi
4. Therapeutic radioactive sources
5. Manufactured hardware devices (such as: screws, bone fittings, shunt catheters, stimulators, recording units, valves, lines, pacemakers, IOL, Ahmed valve, scleral buckle, medpore implant etc.)
6. Intrauterine contraceptive devices
7. Breast tissue expanders
8. Breast implants , testicular implants and chin implants
9. Tonsils: unless the clinician or pathologist indicates it's abnormal and needs processing or unless abnormal clinical findings are present.
10. Nasal septal cartilage, Internal ear ossicles.
11. Normal rib(s) removed to expose non-tumorous organs, hiatal hernia, kidney transplant
12. Therapeutic abortions with fetal parts

OTHER:

The following specimens may be sent directly to a laboratory other than Surgical Pathology:

1. Cytology specimens
2. Urinary calculi (to Core Laboratory – Gray 5)
3. Portions of tissue for Bacteriology for culture (with its own separate requisition)

Universal precautions should always be used when handling specimens.

Diagnostic specimens that are obtained in conjunction with IRB approved research protocols are to be sent directly to the pathology department who will facilitate the hand off to the researcher. Tissue dissection and allocation can only be performed by the Pathology department.

Specimen Delivery

Specimens for routine pathological examination:

Specimens from the OR (Legacy and Lunder): These specimens should be delivered to the Pathology lab between 6:00AM and 6:00PM. After 6:00PM place these specimens in the Pathology lab walk through refrigerator (specimen generated at the Lunder OR can be placed in the Lunder OR refrigerator)

Other specimens (usually in Formalin fixative) will be delivered to the Pathology lab between 6:AM-7:30 PM. After 7:30 PM deliver to the Core Lab (Gray 5).

When the Pathology lab is closed, the pathology Resident on call (Beeper #23305) should be notified of any specimen that requires immediate attention (rush, special studies)

Intraoperative consultation - gross or microscopic (frozen section):

Indications

- a) Diagnosis required to complete operation or plan immediate (24 hour) postoperative care
- b) Fresh tissue required for special studies (lymphoma markers, electron microscopy, miscellaneous other special studies)

Procedure

Between 8am and 5pm Monday-Friday, specimens should be delivered by OR personnel to the Frozen Section Laboratory (Blake 3), accompanied by a Pathology requisition and appropriately packaged and labeled as indicated below. After 5pm, and on weekends and holidays, page the Pathology Resident on call **as far in advance as possible**. After 8pm, the Pathologist is unlikely to be in the hospital. (**On-Call Pathology Resident: beeper #23305**).

Requisition

In addition to the information listed under REQUISITION, requests for frozen section should include:

- a) OR number and/or extension to call with results
- b) Indication whether patient is awake or asleep
- c) Clinical history
- d) Specific questions to be answered by intraoperative consultation (e.g., adequacy of tissue, presence or absence of metastatic tumor in nodes, status of margins, receptor or marker studies, etc.)

Prior Specimens

If reviewing a prior pathology specimen may assist the pathologist in interpretation of a frozen section, notify the department prior to the operation. Call the Frozen Section Laboratory (x6-7903) and discuss the case with the pathologist or resident on duty.

Specimen Packaging

All specimens should be placed in a container which is clearly labeled with the **patient's name, DOB, MRN, and specimen part type**. Specimen containers must be sealed to prevent leakage of blood or fixative. These containers must then be placed in a specimen bag with the pathology requisition placed in the outside pocket or attached to the exterior of containers that do not fit in specimen transport bags. The exterior of the jar and encasing plastic bag must be free of blood or fluids. Extremely large specimens (i.e., amputations) should be wrapped in a cloth sheet and then placed in a double plastic biohazard bag, which is clearly labeled. Please do not tape requisitions to the specimen.

If several biopsies or specimens are obtained from the same patient, care should be taken that **each is placed in a separate jar and individually labelled with two patient identifiers. Each specimen should be identified on the requisition form**. If there are multiple parts to a case, each specimen must be separately identified in EPIC on the requisition **and** on the specimen containers. All specimens obtained at a single procedure should be sent to Pathology together if possible. Please note in EPIC when the final specimen has been sent on an active case.

Relevant clinical information should be noted in EPIC on the requisition, including the clinical history, the results of relevant diagnostic tests, preoperative diagnosis, operative findings, and prior diagnoses and treatment. The physician should also include information for orienting complicated specimens. Localizing clips and sutures and/or a diagram on the requisition form are helpful as an aid in orienting the specimen. Any special procedures desired (i.e., frozen section, estrogen receptors, lymphoma markers, electron microscopy, special stains, photographs) should be indicated in EPIC on the requisition.

Outside Slides for Review

Whenever a patient is seen at the MGH, relevant surgical pathology slides from other hospitals should be reviewed by the Pathology Department. In all cases in which definitive treatment is to be undertaken at MGH based on an outside pathology diagnosis, outside slides should be reviewed by the MGH Pathology Department. Outside slides should be submitted to the Pathology Laboratory, Warren 219, together with: 1) a properly completed Pathology requisition and 2) a copy of the Pathology Report from the outside hospital. This is necessary to ensure that the correct slides have been received and to provide a gross description and section code.

Specimen Refusal

The Pathology Department reserves the right to refuse specimens that are received unlabeled, without a requisition, with an incomplete requisition (lacking any of the above items) and/or inappropriately packaged (leaking or bloody). The originating clinic/OR will be contacted and **MUST** correct the deficiency including completing a **Specimen Verification Form** before the specimen can be processed.

Radioactive Materials

The Pathology requisition entered should indicate the nature and location of any radioactive pellets or rods in the specimen. Notation should also be made of the time of administration and the type of therapeutically active radioisotopes recently profused through the tissue (this does not include diagnostic tracer doses).

Expedited Processing

All diagnostic biopsy specimens are considered to be a high priority. Slides on small specimens are generally available same day or by the following morning (specimens from Friday operations are available Monday morning) and are then examined by a Staff Pathologist. Reports on small, uncomplicated cases will generally be available by the end of the second post-operative working day. Need for special studies and additional sections will delay many difficult diagnostic cases.

In cases of an emergency situation, in which a diagnosis is required in <24 hours after operation, and which cannot be made on a frozen section, selected slides can be made available for early review by a Staff Pathologist. Expedited processing can be offered only on small specimens, and **only with prior approval of the Staff Pathologist** responsible for signing out the case. The rush request should be indicated on the EPIC requisition or communicated to the Pathology lab. Call the surgical pathology lab x4-1449 during working hours, or page the Pathology Chief Resident (Beeper #31768) after hours.

Routine clinical tests have an expected turn-around time of 24hrs, exceptions being rush cases and those which require additional processing. Research tests are given a maximum TAT of 14 working days.