

## SURGICAL PATHOLOGY - HISTOLOGY

### Request Forms

The following information should be submitted on the “Anatomic Pathology Request” form, which is required to accompany any specimens sent pathology:

- Patient’s full name
- Date of Birth
- Medical Record number
- Gender
- Name of ordering clinician, with signature
- Name of any referring clinician desiring a report
- Type of surgical specimen
- Area of body from which specimen was removed
- Pre- and Post-operative diagnoses
- Pertinent clinical history
- Request for special procedures or other non-routine processing, if applicable

### Tissue Preparation in the Operating Room

\*\* All specimen containers must be labeled with at least two patient identifiers, and the site/nature of the specimen being submitted.

Containers of various sizes are provided for specimens. Specimens which are small should be placed in a container prefilled with 10% formalin fixative. Any specimen that will not easily fit into the small containers should arrive in Histology in larger containers without fixative. No specimen containers or fixatives other than those mentioned above should be used for routine specimens. Plastic test tubes should only be used for urinary stones. Surgeons should designate on the requisition if they think special procedures or fixatives may be required. Any specimen which is not delivered to Histology prior to closing should be refrigerated until delivered, unless otherwise indicated. If there is any doubt as to how a specimen should be handled, the Histology Lab (or the Pathologist on call if after-hours) should be consulted. The Histology Lab routine hours are Monday through Friday (non-Holiday) from 7:30 a.m. to 4:30 p.m. A Pathologist is always on-call when the Histology Lab is closed (e.g., to perform frozen sections or take specimens for rapid processing). The Pathologist on-call can be reached through Vocera or the hospital operator.

### Routine Processing

Routine uncomplicated biopsy specimens received in Histology before 4:00 p.m. will have a microscopic dictation completed within 2 working days, Monday through Friday, in most cases. Those requiring special fixation, special studies, or extra procedures may require additional time.

### **Rapid Processing**

The indication for rapid processing is left to the discretion of the clinician, but since the pathologist is responsible for correct handling of the patient's specimen, it may not be possible to honor all requests for rapid processing. For example, fatty specimens such as breast excisional biopsies may require fixation in formalin for several hours, precluding rapid processing. The request form must have the contact information of the clinician requesting rapid processing. Specimens received in Histology by 4:00 p.m. with a request for rapid processing will have at least a preliminary verbal assessment the following day, preferably by 2 p.m. A biopsy received Friday for rapid processing can have a preliminary assessment Monday morning, or if needed for emergency clinical care, on Saturday.

### **Frozen Section Consultation**

The performance of frozen section for rapid diagnosis is a specialized procedure, which should not be used simply as a matter of routine. In certain instances, freezing of a tissue specimen may be contraindicated (e.g., melanocytic skin lesions). Frozen sections may be performed to establish the presence and nature of a lesion, to determine adequacy of surgical margins, or to establish whether tissue obtained is lesional and/or diagnostic material. If the frozen section examination will not influence in any way the surgical procedure, the frozen section procedure is not indicated. The need for intraoperative surgical pathology consultation with frozen section should be anticipated whenever possible and indicated on the operative schedule. The Pathologist on-call should be contacted for frozen sections during times when the Histology Lab is closed. The data required on the "Anatomic Pathology Request" form is also required on the Frozen Section Requisition and Report form. In addition, the contributing clinician should indicate the reason for frozen section, and the OR room/call back number for results.

### **Frozen Section Repeat Back**

The pathologist delivering the verbal frozen section diagnosis will identify the patient by two unique identifiers, name as well as date of birth or medical record number. Following receipt of the frozen section diagnosis, the requesting clinician is required to verbally repeat back the diagnosis and patient identification. The repeat back process is documented on the frozen section request slip as well as in the final pathology report.

### **Specimens Which Need not be Sent to Surgical Pathology**

In accordance with the rules and regulations of Christiana Care Health Services, Christiana and Wilmington Hospital Medical/Dental Staff, "all tissues and other materials removed at operation, whether from an inpatient or an outpatient, shall be sent to Pathology with a complete and signed pathology request, except for certain specimens that need not be sent to Pathology:"

- Bone fragments; bone from ostectomy site or as part of a constructive or corrective orthopedic procedure

- Scars when there is no history of malignancy
- Rib segments of other tissues removed only for the purposes of gaining surgical access provided the patient does not have a history of malignancy
- Certain foreign bodies (**Note: Bullets and/or other foreign bodies needed by the police for use as legal evidence should not be sent to Pathology**)
- Hernias and/or hydrocele sacs; lipomas of the spermatic cord
- Tissues debrided following trauma, such as muscle, omentum, fat and skin
- Fat removed by liposuction
- Fingernails and/or toenails, bunions
- Foreskin from newborns
- Teeth when there is no attached soft tissue and/or teeth fragments or gingival fragments
- Intrauterine device without soft tissue
- Metallic or other implanted prosthetic devices that have not contributed to patient illness, injury, or death
- Normal iris in iridectomies; normal muscle removed in the course of muscle shortening operations of the eye; cataracts
- Placentas from uncomplicated singleton pregnancies that appear normal at the time of delivery
- Tissue removed in plastic repairs such as ectropion
- Vaginal mucous membrane removed incidental to vaginal repair
- Varices; veins from stripping

If it is elected not to send one of the above specimens, the clinician electing to discard the specimen must record this decision within the OR record. In addition, the nurse in charge of the OR must document this disposal within the OR record.

### **Preservation of Specimens, Paraffin Blocks and Slides**

Specimens received in the Histology Laboratory will be kept by Histology for 2 weeks after the initial surgical sign-out date. Paraffin blocks and glass slides are kept for 10 years.

### **Specimens Requiring Special Handling**

#### **Prosthetic Breast Implants**

At the surgeon's discretion breast implants removed in the OR may be sent to Pathology for examination and retention by Pathology Department for at least two years. Breast implants may be removed from the Pathology Department by the patient or patient's designated representative after signing the appropriate form verifying receipt of the specimen. Breast implants may be sent to the manufacturer with signed patient release indicating manufacturer name and provision of all appropriate shipping materials.

#### **Breast Specimens**

Diagnostic breast specimens, including both biopsies and resection specimens, should be sent to Histology as soon as possible and the time of the breast specimen's removal from

the patient should be recorded in the time collected section on the requisition slip by the clinician obtaining the specimen. Specimens can be sent fresh or in formalin. Fresh breast specimens must be delivered to Histology within 1 hour of removal from the patient. The goal of handling breast specimens is to minimize cold ischemia time (time between resection and fixation), so that any needed prognostic markers in cases of breast carcinoma will not degrade.

### **Gallbladder**

Gallbladder specimens may be opened in the OR at the discretion of the surgeon. Prior to submission to Histology, the specimen should be covered with 10% buffered formalin in a proper sized container. If the gallbladder is submitted in an endoscopy bag, the bag should be loosened to allow formalin fixation to begin. Stones should be sent to Histology and not given to the patient.

### **Lymph Node Biopsy**

Lymph node biopsies requiring flow cytometry for possible lymphoma should be performed as early in the day as possible, Monday through Friday. The need for flow cytometry should be indicated on the requisition whenever possible. Specimens for flow cytometry must be submitted unfixed. Lymph nodes removed for reasons not requiring flow cytometry may be submitted in formalin.

### **Specimens for Microbiological Study**

Appropriate cultures should be obtained in the OR under sterile conditions prior to specimen submission to Histology. For information regarding proper collection techniques, call the Microbiology Laboratory at 302-733-3675 at ChristianaCare or at 302-428-2482 at Wilmington Hospital. In unusual circumstances, when cultures cannot be obtained in the OR, they can be taken by the examining surgical Pathologist. Specimens which cannot be cultured in the operating room must be sent to the laboratory without fixative.

### **Muscle and Nerve Biopsy**

Physicians desiring histochemical stains on muscle or nerve biopsies should notify the Histology Laboratory at least 1 day in advance so that preparations can be made for processing the specimen. Muscle or nerve biopsies should be submitted unfixed (saline soaked gauze is acceptable, especially for nerve biopsies). Because muscle and nerve biopsies are sent out to TheraPath, they are best performed Monday through Friday as early in the day as possible.

### **Products of Conception (POC)**

At the request of the Department of Obstetrics and Gynecology, POC specimens may be sampled for genetic testing. Any genetic testing requires a signed consent for testing by the mother. Fetal remains greater than 20 weeks gestation or weighing greater than 350 g requires an autopsy permit for examination. If no autopsy consent is submitted,

skin/tissue from the fetus cannot be obtained for genetics studies. Fetal remains less than 20 weeks and weighing less than 350 g may be examined as a surgical specimen.

### **Renal Biopsy**

Biopsies of the kidney require specialized methods of fixation and processing if immunofluorescent or electron microscopy examinations are to be performed. The need for such studies should be anticipated and the laboratory notified at least 48 hours in advance at 302-733-3659 if a technologist is requested to assist in specimen collection.

### **Research Specimens**

The Department of Surgical Pathology supports research at ChristianaCare. All research requires a research and/or tissue procurement protocol by ChristianaCare, with Institutional Review Board approval as required, and documentation provided as appropriate. Additional guidelines are as follows:

- Research and/or tissue procurement protocol requiring collection of tissue removed at surgery or taken at autopsy at ChristianaCare must be approved by the Director of Surgical Pathology or Autopsy Pathology (as appropriate), or their designee.
- If tissue from a ChristianaCare patient, living or dead, is requested for scientific research or other similar purpose, the appropriate consents and/or permits for performing surgery or autopsy must have been signed by the appropriate person. Forms must specifically state that tissue is allowed to be used for research purposes.
- Tissue received in Histology will be examined by a Pathologist or designee (e.g., a Pathologist Assistant) for selection of material to be used for research or submission to tissue procurement. No material will be given if, in the opinion of the examining Pathologist, the removal of the material would jeopardize the diagnostic examination of the tissue in any way.
- Tissue leaving Histology for research or tissue procurement purposes will be deidentified in accordance with the corresponding research or tissue procurement protocol.

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