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I. Submission of Tissue Samples for Evaluation

All tissue specimens and/or specimens removed surgically are to be sent to the Surgical Pathology Department for examination. Specimens that may be exempted from the requirement to be examined by a pathologist include, but are not necessarily limited to, the following:

- Specimens that by their nature or condition do not permit fruitful examination, such as a cataract, orthopedic appliance, foreign body, or portion of rib removed only to enhance operative exposure;
- Therapeutic radioactive sources, the removal of which shall be guided by radiation safety monitoring requirements;
- Traumatically injured members that have been amputated and for which examination for either medical or legal reasons is not deemed necessary;
- Foreign bodies (for example, bullets) that for legal reasons are given directly in the chain of custody to law enforcement representatives;
- Foreskin from the circumcision of a newborn infant;
- Placentas that are grossly normal and have been removed in the course of operative and non-operative obstetrics; and
- Teeth provided the number, including fragments, are recorded in the medical records.

These exemptions may be made by the attending physician, only when the quality of care will not be compromised by the exception, when another suitable means of verification of the removal has been routinely employed, and when there is an authenticated operative or other official report which includes a brief, adequate gross description of the specimen removed. These exemptions are established by the “Rules and Regulations, Medical and Dental Staff: Article III. E.”

II. Tissue Submission Requirements

Two major issues must be addressed when submitting specimens for examination. The first is the necessary requisition. The second is proper steps for maintaining specimen preservation and identification.

A. Completing a requisition: All tissue submitted must be accompanied with a completed “Surgical Pathology Consultation” form (requisition). Specimen containers must be labeled with patient identification and specimen site. A basic requirement to initiating specimen processing is that information on the specimen container label match information on the requisition. When completing the requisition please provide the following information:

1) **Date of procedure.**
2) **Complete patient information:** This information is usually facilitated by addressograph or computer-generated label.
3) **Name (initials) of person completing the requisition:** This information should be annotated in the “written by” box located in the upper left-hand corner.
4) **What location in the medical center is generating the requisition:** Annotate your department area in the “Room No.” box located on the top of the requisition.

5) **Name and Signature of the physician:** This requisition is a doctor’s order and documentation is therefore mandatory.

6) **Type of tissue submitted:** It is essential that this annotation match the corresponding label of the specimen container. More than one specimen may, as space allows, be listed on the same requisition. Multiple specimens are not to be placed in the same container. Each specimen container label must clearly state patient information and what tissue is in the container. Each specimen must have a corresponding annotation on the requisition.

7) **Clinical history:** There are multiple areas to enter detailed history relevant to the specimen submitted. These areas include Pre-Op Diagnosis, Operation Performed, Post-Op Diagnosis and History or Remarks.

8) **Priority the specimen should be handled:** This critical indicator tells Surgical Pathology concisely what the clinician wants done with the specimen. Priority is indicated by selecting the appropriate box on the requisition. Only one box should be checked on any one requisition. Selection of a specific priority determines how the specimen should be handled. These priorities are explained in the next section.

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**B. Handling the Tissue:** The integrity of specimen preservation is an utmost concern. It begins with the priority of how the specimen should be handled as determined by the physician. Please document the time of excision in the appropriate area of the requisition. Document the time placed into fixative for breast cases. Tissue specimens should be delivered to Histopathology as soon as possible. Many situations require tissue specimens be delivered immediately. These priorities (as designated by the physician) and their handling requirements are as follows:

1) **Routine:** _These specimens, when their size allows, should be placed in neutral buffered formalin._ Specimens (and accompanying requisitions) submitted for routine examination should be delivered as soon as possible to the Histology Section of the Laboratory. Personnel delivering these specimens are required to register the specimen in the logbook located in Histology. _Tissue specimens submitted for examination can never be sent by the pneumatic tube; they must be hand-delivered (absolutely no exceptions)._  

2) **Frozen Section:** When this priority is chosen the specimen must be delivered immediately, without any fixative, to the Histology Section. _The specimen (and accompanying requisition) must be given directly to Histology personnel._ If no personnel can be located in the Histology Section the specimen must be given to Central Processing personnel. _At no time can a Frozen Section be “dropped off” or “tubed” it must be hand-delivered and acknowledged by Histology personnel._ A copy of the patient’s History and Physical Examination (H&P) as well as a progress sheet (with correct patient demographics) _must_ accompany the specimen and requisition. Since a consultation will occur it is required that a patient progress notes sheet accompany the specimen to facilitate documentation.
in the chart by a Pathologist. Please include a phone number to facilitate immediate physician contact. Prior notification of a Pathologist is suggested.

3) **Gross Consult & Call O.R.**: This priority is assigned when a physician feels it necessary for a specimen (and accompanying requisition) to be examined immediately and consult with a Pathologist. When this priority is chosen the specimen must be delivered immediately, without any fixative, to the Histology Section. Prior notification of a Pathologist is highly recommended. **At no time can a “Gross Consult” be “dropped off” or “tubed” it must be hand delivered and acknowledged by Histology personnel.** Since a consultation will occur it is required that a patient progress notes sheet accompany the specimen to facilitate documentation in the chart by a Pathologist. **Specimens are never sent by pneumatic tube.** Any specimen not in fixative must be given directly to Histology personnel.

4) **Fresh, No Frozen**: There are some specimens that by their intrinsic nature should be submitted without any fixative. This priority is chosen when a physician has a clear understanding with the Pathologists that this is the optimum way to submit the specimen. This understanding is determined through prior notification with the Pathologist. When this priority is chosen the specimen must be delivered immediately, without any fixative, to the Histology Section. **At no time can a “fresh” specimen be “dropped off” or “tubed” it must be hand-delivered and acknowledged by Histology personnel. Specimens (and accompanying requisition) are never sent by pneumatic tube.** Some special considerations that determine why a specimen should be submitted without fixative, in a “fresh” state are enumerated in the next section.

5) **Cytology**: Specimens, usually smears and fluids (and the accompanying requisitions) should be taken directly to the Cytology department during routine hours. After hours, cytology specimens can be left in the histology specimen refrigerator. More detailed instructions and guidelines may be found in the Cytology section of this manual.

III. **Special Handling Considerations.**

Situations arise where very specific infrequent testing is required that takes precedence over the common priorities listed above. This section addresses some of those situations that involve critical thinking decisions in the handling of tissue specimens. **When any doubt exists as to proper handling and submission please contact the Histology Section (ext.12370).**

A. **Lymph nodes**: Please submit all lymph nodes in a fresh and sterile condition. This is in order to make touch imprint preparations, freeze for potential immunohistochemical procedures, obtain fresh nodal tissue for flow cytometry, or perform tissue cultures. This “triaging” must be performed immediately. Please deliver specimens to Histopathology ASAP. The requisition should be marked with a priority of “fresh”.

B. **Chromosome Analysis (Cytogenetics)**: Tissue submitted for chromosome analysis does not go through the Histology section. Chromosome analysis is performed at an outside reference facility. When chromosome analysis is required it is **the responsibility of the physician to:**
• **Obtain the sample as quickly as possible.** If not already on the ward/clinic the media that tissue samples are required to be placed in is stored in the Microbiology section of the laboratory.

• **Complete the required “chromosome request” form which is different than a routine tissue requisition.** This **Mandatory Form** is located in the send-out area of the Laboratory. This form is extremely useful as it provides explicit detailed directions on how to handle materials. (Located on the reverse side of the form).

• If both chromosome analysis and routine Histopathology evaluation are required then the required sample should be placed in the required media and the rest put in formalin. The physician should ensure that both the **chromosome request form and the “Surgical Pathology Consultation” form (requisition)** are completed.

• Please give Material submitted (properly completed Chromosome Analysis Request Form) to Laboratory Central Processing Personnel immediately.

C. **Direct Immuno-Fluorescence (DIF):** This test requires that the specimen be placed in Michel’s Transport Media. A physician expressing the need for this test should first complete the required requisition (as described above under II.A.) with a priority of “fresh, no frozen”. Michel’s Transport media can be obtained from the Histology Section. The request for direct immuno-fluorescence should be clearly indicated on the accompanying requisition.

D. **Placentas:** Because of their size and circumstances placentas submitted for evaluations have a special requisition form. It includes additional specific prompts for pertinent clinical information. Upon completion by the physician, the requisition and the specimen, in a fresh state, should be taken, ASAP, to Histopathology, registered into the logbook and placed in the specimen refrigerator.

E. **Breast Tissue:** Breast tissue frequently requires the physician to provide additional information not normally facilitated on the normal requisition. The special requisition created for breast tissue provides diagrams to facilitate the physician providing information regarding the orientation (topography) of the specimen. Because of special handling requirements breast tissue should normally be submitted in a “fresh” state with prior notification whenever feasible. If submitted in formalin, please document the time placed in fixative.

F. **Quantitative Metal Analysis:** Specimens submitted for quantitative metal, usually iron or copper, must be submitted in special metal free containers that can be obtained from Laboratory Send-out personnel. The routine requisition must be completed with explicit directives for the testing required.

G. **Specimens for send-out to other institutions:** The Histopathology section will accommodate the technical aspects of sending a specimen to an outside reference laboratory. These specimens usually require a specific infrequent testing regime desired by the physician. In order to facilitate such testing, the Histopathology section requires the following information from the physician:

  • A completed “Surgical Pathology Consultation” form (requisition).
  • An exact mailing address.
- Specific tissue handling requirements
- Completed paperwork/documentation as required by the outside institution.

Such requests require prior notification with the Histopathology Laboratory. Advance preparation and/or notification with the outside facility may be required. **Failure to provide the above will significantly delay the request for specimen processing.**

H. **Cultures:** Tissue submitted for microbiology testing should be placed in a sterile container. A Microbiology Test Request Form should be completed and submitted with the sterile tissue container. If the physician desires routine Histopathology examination a separate “**Surgical Pathology Consultation**” form (requisition) must also be submitted. Tissue may never be transported by pneumatic tube.

I. **Bone Marrow:** Bone marrow biopsy procedures should be scheduled through the Hematology Section. (ext. 12363)