Clinical
Surgical Pathology - Gross Room
Procedure
surgpath19.01

Specimen Accession & Preparation

<table>
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<tr>
<th>Final Approval: October 2010</th>
<th>Effective: October 2010</th>
<th>Next Review Date: August 2011</th>
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List all stakeholder(s) and dates of approval:

<table>
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<tr>
<th>Stakeholder Name(s): Geoffrey Werner</th>
<th>Date: 8.2010</th>
<th>Reviewed</th>
<th>Revised</th>
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<tbody>
<tr>
<td>Stakeholder Name(s): Mark Magilner, MD</td>
<td>Date: 5/2010</td>
<td>Reviewed</td>
<td>Revised</td>
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<td>Stakeholder Name(s):</td>
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Describe briefly the most recent revision made to this policy, procedure or protocol & why:

New Procedure

Purpose/Policy Statement:

Upon delivery of tissue specimens to the Pathology Gross Room, each case is labeled with an identifying accession number and recorded in CoPath. Case types include the following designations: L, LA and LB (outside patients), M, MA and MB (hospital patients). This is the identification by which the specimen is followed during gross examination, dissection, and placement into a tissue cassette for processing.

Definitions:

- n/a

STEPS / KEY POINTS

PROCEDURE:

1. By visualizing the type of requisition form submitted, organize received specimens into group designations:
   - M = Salem Hospital cases
   - L = Outside cases with sub groups of -
     - Hospital submissions
     - Physician Office submissions

2. A completed pathology requisition must accompany specimens and include the following information:
   - Patient’s full name.
   - Patient unique identifying information (DOB, SSN, etc.).
   - Specific tissue identification.
   - Preoperative diagnosis/Clinical history.
   - Postoperative diagnosis
   - Physician’s full name
   - Patient’s billing information
   - Date of collection.
• Date received in pathology (time-stamp)
All tissue sample containers must be clearly labeled with:

• Patient’s full name.
• Patient unique identifying information (DOB, SSN, etc.).
• Specific tissue identification.

3. **DETERMINE SPECIMEN ADEQUACY BY EXAMINATION OF ALL MATERIAL RECEIVED IN THE DEPARTMENT FOR THE DEFICIENCIES LISTED BELOW.**
   
a. Specimens not bagged or bagged inadequately  
b. Requisition placed in bag improperly  
c. Lid not sealed properly and/or fluid spill contamination  
d. Inadequate amount of fixative fluid  
e. No specimen source on container  
f. No clinical history  
g. No physician name.
   
h. Requisition form missing  
i. Specimen container missing  
j. Patient’s name not on the specimen container  
k. Discordant information between requisition form and specimen container

**FOR OUTSIDE CASES (L Class):**
If deficiency “a” to “g” is encountered, the deficiency is recorded in the CoPath Deficiency Record System with all required information and the specimen is then accessioned and processed.

If deficiency “h” to “k” is encountered, the specimen should not be accessioned until the deficiency is corrected. An entry is made in the CoPath Deficiency Record System with all required information and the specimen is returned to the site of origin with a *Specimen Deficiency Form* for correction.

The *Specimen Deficiency Form* will be completed by the Laboratory staff who encountered the deficiency and entered the specimen data into the CoPath Deficiency Record System.

Contact by telephone the originating physician office client to:

• notify them of the problem  
• identify the contact person for return of the specimen  
• notify them of the method of specimen return

The *Specimen Deficiency Form* will be completed as follows:

Date: ___ (current date)  
To: ___ (name of telephone contact person)  
At: ___ (name of originating physician office client)  
RE: ___ (brief explanation if necessary)

Mark the PROBLEM category.

Secure the specimen in a transport bag with the requisition form and the *Specimen Deficiency Form*, clearly labeled with the destination and contact person visible on the outside. Forward the specimen to the SHRLS Courier Services pick-up location.

**FOR IN-HOUSE CASES (M Class):**
If deficiency “a” to “g” is encountered, the deficiency is recorded in the CoPath deficiency record system with all required information and the specimen is then accessioned and processed.
If deficiency “h” to “k” is encountered, the specimen should not be accessioned until the deficiency is corrected. An entry is made into the CoPath Deficiency Record System with all required information and the originating location is contacted and a request made for correction of the deficiency.

4. Validate the condition of the submitted sample. The tissues submitted in 10% NBF must be submerged in an adequate amount of fixative.
   - AT THIS TIME, FORMALIN MUST BE ADDED TO CONTAINERS TO PROVIDE OPTIMUM FIXATION. SPECIMENS MAY BE TRANSFERRED TO APPROPRIATELY SIZED CONTAINER TO ALLOW THE ADDITION OF SUPPLEMENTAL FORMALIN.

5. Organize the samples into an alignment that prevents accessioning of consecutive “like” specimens. This alignment must allow for samples that will be DECAL or GROSS EXAM ONLY to not be used as dividers between consecutive like specimens, since their handling will take them out of the normal consecutive numerical handling as processing continues.

6. Utilizing CoPath, accession each specimen and await the auto-generated print of the specimen labels.

7. Apply correctly identified printed labels to both the specimen container and the requisition form. AS EACH LABEL IS APPLIED TO A CASE REQUISITION FORM AND IT’S SPECIMEN CONTAINERS, VALIDATE THE PATIENT NAME AND/OR ID NUMBER AND THE SPECIMEN CONTAINER NUMBER.

8. Numerically align the labeled specimen containers on the counter, adjacent to the gross exam area, ERO cases are removed from numerical order and dictated on separate Job Numbers.

9. Utilizing CoPath, generate a Specimen Accession Log.

10. Utilizing the automated cassette labeler, generate processing cassettes for each accessioned case according to established department color-code criteria. AS EACH CASSETTE IS BEING PLACED WITH THE CORRESPONDING SPECIMEN CONTAINERS, VALIDATE THE PATIENT NAME AND/OR ID NUMBER AND THE SPECIMEN CONTAINER NUMBER.

Each case requiring more than one cassette must be designated with a sub-label that DISTINGUISHES IT FROM ALL OTHER CASSETTES.

   a. For example:
      - a single container labeled M04-1234 may result in five cassettes, sub-labeled A,B,C,D,E,
      - multi-container cases with one cassette each will be sub-labeled as 1,2,3,4,5.
      - multiple containers with multiple cassettes will be labeled per container and per resulting cassette (1A, 1B, 2, 3A, 3B, 3C, etc.) and WITH NO DUPLICATIONS.

   b. Special handling is also recorded on the tissue cassette;
      - “DEC” for samples treated for decalcification,
      - “ANHYDROUS” processing.

11. Set out dissection instruments; ruler, forceps, scalpel, strainer, etc.

12. Fill cassette-storage receptacles with fresh 10% Neutral Buffered Formalin.

13. Turn ON Dictaphone and select corresponding ID key for personal dictation.

14. When laboratory staff assist at the grossing bench:
   - By individual case, present specimen containers to the pathologist/pathologist assistant accompanied by the requisition form and the pre-labeled tissue cassettes in sequential order for the case; prepare additional cassettes as needed.
   - As each case is placed onto the Gross Board, the assistant will match the identification number of the specimen container with the corresponding numbered embedding cassettes.
   - As the dissected tissue is placed into the embedding cassette, the pathologist/pathologist assistant will verify the identification of the case.
   - Any tissue specimen where size (following dehydration in alcohol during the processing cycle) and/or consistency (mucoid, friable) may compromise the sample’s integrity must be additionally be secured inside the cassette by enclosure in tissue paper, nylon specimen bag or placement between two embedding sponges.
   - As each case is completed and prior to release of their work the assistant will:
a. validate the accession number and sub-labeling on the cassettes
b. for small biopsies and dissections, on the right side of the cassette write the number of sample pieces contained within.
c. for accountability documentation, the assistant will write their initials on the right side of each cassette.

15. Upon completion of each grossing session, tissue remains from each case are either prepared for wet-tissue storage:
   • Specimens originally submitted in snap-top containers are transferred to and secured in a heat-sealed bag with 10% Neutral Buffered Formalin (NBF) and the original accession label is also transferred to identify the sample.
   • Specimens originally submitted in screw-top jars are secured in their original container with 10% Neutral Buffered Formalin (NBF) and the original accession label is also transferred to identify the sample.
   • The containers are arranged somewhat numerically in bins that are labeled by accession group and date. These are retained in the Gross Room storage cabinets for approximately one month.

16. To decontaminate instruments and work area use a solution of at least 10% Sodium Hypochlorite (chlorine bleach) to immerse all instruments and accessories, and to thoroughly drench the dissecting area and wipe down all other possibly contaminated work surfaces. Detergent may be added to this solution as a surfactant. Additionally, 100% ethyl alcohol or disinfectant cleanser may be utilized as a cleaning aid and decontaminant.

QUALITY CONTROL:
1. Tissue cassette labeling discrepancies are documented in the Continuous Quality Improvement record book.
2. For accountability documentation, each staff member will write their initials on the right side of each tissue cassette and the number of sample pieces contained within prior to the release of their work.
3. All saved wet tissue and/or specimen remnants are discarded into a BIOHAZARD BOX on a rotational basis after approximately one month and documented in the WET TISSUE DISPOSAL record book. Exceptions are specimens that require long-term wet tissue retention for additional testing or medicolegal considerations as directed on the Pathology Requisition form, by the pathologist assistant or by a pathologist. The specimens in this long-term storage are retained in the Pathology Gross Room within designated locked storage cabinets OR IN AN ALTERNATIVE LOCKED LABORATORY STORAGE LOCATION. Specimen RETENTION for breast implant cases is three years.
4. Limb amputation specimens are stored in a designated refrigerator storage area until the completion of the Gross Exam, at that time they are returned to the same designated refrigerator storage and retained until the pathology report is finalized. They are disposed into a BIOHAZARD BOX.
5. The technical staff assigned to the decalcification task records a list of all tissue cassette accession numbers each morning. At the end of the workday, this list will be reconciled against the remaining requisition forms and the CoPath Tissue Processing Batch Log and accountability documentation will be recorded for all cassettes from that day.

PROFICIENCY TESTING: College of American Pathologists HistoQIP, IHC Survey.

RESULTS: N/A

PROCEDURE NOTES:
1. Tissue samples submitted for ANHYDROUS processing are placed into 100% Ethyl Alcohol (EtOH) reagent for fixation and remain in the Gross Room until the end of the day and transported to the Histology Department for appropriate anhydrous processing.
2. Tissue samples that are calcified require special handling:
   • Cassettes containing calcified tissue are placed into DECAL F (Formic Acid) reagent following Gross Examination and remain in the Gross Room. Following examination by the technical staff to determine that complete sample decalcification has been achieved, the decalcifying solution is removed by a 10 minute wash in running tap water and the cassettes are transferred to 10% NBF in the Gross Room. More calcified specimens will be transferred to a Hydrochloric Acid solution following 24 hours in Formic Acid, until such time is deemed by the pathologist assistant, that the tissue has been adequately decalcified and appropriate for histological processing.
The technical staff assigned to the decalcification task records a list of all tissue cassette accession numbers each morning. At the end of the workday, this list will be reconciled against the remaining requisition forms and the CoPath Tissue Processing Batch Log and accountability documentation will be recorded for all cassettes from that day.

LIMITATIONS OF PROCEDURE: N/A

**Equipment/Supplies** (If Applicable):
- Disposable gloves
- Laboratory coat
- Eye protection

**SPECIMEN:** Human whole organ specimens, tissue biopsies submitted “fresh” or in 10% Neutral Buffered Formalin (NBF).

**MATERIALS, REAGENTS:**
- Decalcifying Solution F - Richard Allan Cal-Rite
- 10% Neutral Buffered Formalin (NBF)
- 100% Ethyl Alcohol

**INSTRUMENTATION OR EQUIPMENT:**
- Laboratory Information System
- Pathology Gross Room Printer

**Form Name & Number or Attachment Name** (If Applicable):
- surgpath19

**Author Position:**
- Histology Supervisor

**Review/Revision Authority** (Position Not Individual Name):
- Medical Director, Operation Manager, Histology Supervisor, Pathologist Assistant

**Expert Consultant Position/s** (Not Individual Name/s):
- IS Manager

**References** (Required for Clinical Documents):

**MANUFACTURER'S PACKAGE BROCHURES/INSERT:** N/A
Is there a Regulatory Requirement?  Yes ☐ No ☐
If yes, insert requirement information here:

Review History (No Changes):
n/a

Revision History (Note changes in area under header):
n/a

Computer Search Words:
n/a

Policy, Procedure or Protocol Cross Reference Information:
n/a