

## **Histology Laboratory Specimen Collection**

### **SURGICAL PATHOLOGY**

#### **Specimen Containers**

Tissue specimens must be placed in a primary container appropriate for the size of the specimen. For small specimens add 10% neutral buffered formalin 10 times the volume of the specimen. For large specimens, attempt to cover with buffered formalin. This includes placentas and fetuses from referral accounts.

The primary container must be securely sealed to prevent leakage. Whirlpack bags must be folded over SEVERAL times. Covers of screw top containers must be tightened. The primary container must be placed in a secondary container with absorbent material to contain potential leaks. Each container must display the OSHA required FORMALDEHYDE precautionary information.

Take every precaution to assure that the container will not leak in transit.

**NOTE:** It is extremely important that tissue specimens be preserved with **10% neutral buffered formalin**. Do not use formalin substitutes or 10% formalin that is not buffered.

All surgical biopsy and resection specimens require adequate fixation in 10% neutral buffered formalin. The relative volume of formalin to the mass of tissue is important, as well as the time in formalin to ensure appropriate fixation, processing and slide preparation. Specimens should be promptly placed in formalin (within 1 hour) and the time of excision and the time of placement in the formalin should be indicated on the specimen requisition slip (cold ischemic time). Inadequate fixation is a problem with larger specimens, especially if shipped to the laboratory; but prolonged formalin fixation can be a problem when testing tumor tissue for certain biologic markers (ER, PR, Her2/neu, EGFR, etc.). If large specimens are shipped to the laboratory from a distance, the surgeon may consider bisecting or “opening” the specimen to allow exposure of the tissue to the fixative. This should be done only after communication with the pathologist and in such a way as not to compromise the specimen integrity, especially the surgical margins. Support staff should be instructed on the importance of ensuring that specimen containers are adequately sealed and of the risks associated with formalin exposure as per OSHA guidelines. Appropriate fixation is an essential first step in obtaining an accurate diagnosis for the patients we serve.

#### **Labeling**

Each primary specimen container must be labeled with the patient's complete name, a unique identification number, and the specimen site. The identical information must be on the surgical pathology requisition form.

The College of American Pathologists (CAP) requires that at least 2 identifiers are used when labeling specimen containers at the time of collection. Acceptable identifiers include but are not limited to: patient name, date of birth, hospital number, social security number, requisition number, accession number, and unique random number.

Please note – a location such as a room number is not an acceptable number.

#### **Requisition Form**

The specimen must be accompanied by a completed surgical pathology requisition form to include the patient's complete name, DOB (Date of birth), a unique identification number, collection date, specimen site, any pertinent patient history, last & first names of the provider along with last & first names of any physician to receive a CC copy of the report, and the time of excision and time of specimen placement in the formalin.

The same identifiers placed on the specimen containers need to also be on the surgical pathology requisition form in order to tie the two together. It is good laboratory practice to use 2 identifiers.

## TISSUE SPECIMENS

Please call the Histology Lab at 701-530-6733 with any questions on these procedures. Remember, we are dealing with specimens that cannot be “redrawn” – it is imperative that they are handled correctly!

### Labeling

Label specimen containers with the **patient’s label**, the **type of specimen** and the **anatomic location from which it was removed**. If the specimen is not labeled adequately, the histology staff will follow the appropriate steps for specimen identification verification. No processing will occur until this is done.

### Requisition Form

Complete a “Surgical Pathology Data” requisition form for each patient. The patient **label** must be **placed** on the requisition.

## ROUTINE SPECIMENS

Place in 10 % neutral buffered formalin. The recommended quantity of formalin to use is 10 times the volume of the specimen.

This is not always possible with large specimens. An attempt should be made to cover the entire specimen with formalin. This includes placentas and fetuses from referral accounts.

## FROZEN SECTION SPECIMENS

Please call the Histology Lab at 701-530-6733 when a procedure requiring a frozen section is scheduled. Transport specimens on a **saline dampened telfa pad** inserted into a whirl bag, and labeled. Take specimens for frozen section to the histology laboratory **STAT**. **Do not** place specimens for frozen sections in formalin and **do not** allow them to dry out. **Do not** use filter paper or gauze because the specimen can stick to this and dry out. Specimens **must** be labeled with patient identification. Call the Histology Lab at 701-530-6733 before transporting the specimen so they can be prepared for timely processing.

## FNA (Fine Needle Aspirate)

Notify the Histology Lab at 701-530-6733 two days in advance. On the day of the procedure, please call 15 minutes prior to starting the procedure at 701-530-6733.

## FETUSES

### For Fetuses under 20 weeks gestation

Fetus should be placed in a labeled container without formalin.

Deliver to the Histology Lab on Monday-Friday during the day, along with a signed Consent for Disposal and Pathology Surgical examination form if pathologist examination is requested.

On evenings, nights, weekends or holidays, call Security to place properly labeled fetus in the histology refrigerator. Signed Consent for Disposal and examination requisition are sent with the fetus and placed in the requisition bucket. **Do not** place this consent or examination form in the refrigerator along with the fetus. Products of conception or very small fetuses may be placed in 10% formalin.

### For Fetuses 20 weeks gestation and older (is handled as an autopsy if examination is requested)

A CHI St. Alexius Health nursing supervisor will assist Security in placing them in the morgue.

Fetuses should be placed in a labeled container without formalin, and they should be placed into the body cooler in the morgue. Security has sole access to the morgue cooler.

A disposal permit, signed by the parents, should be taken to Histology. **Do not** place this permit in the

morgue cooler along with the fetus. Make sure Histology knows about it.  
After hours, either tube or fax consents. (Tube station #209, Fax 530-6735) The placenta must accompany the fetus to the laboratory.

Referral accounts fetuses and placentas should be sent with formalin added.

### **MUSCLE BIOPSY**

Schedule for Monday, Tuesday or Wednesday. Notify the Histology Lab at 701-530- 6733 two days in advance.

### **KIDNEY BIOPSY**

Notify the Histology Lab at 701-530- 6733 two days in advance.

### **SURAL NERVE BIOPSY**

Schedule for Monday, Tuesday, Wednesday, or Thursday. Notify the Histology Lab at 701-530-6733 two days in advance.

If there are questions about other types of specimens or if there are questions about specimen handling, call the Histology Lab at 701-530-6733.

### **Contacts**

Deanne Knutson – Anatomic Pathology Supervisor Ph: 701-530-6730

Dr. Wesley Ellison – Pathologist Ph: 701-530-6745

Pathologist on call – Beeper #0468