

**CONWAY REGIONAL HEALTH SYSTEM  
CLINICAL LABORATORY**

**Pathology Specimen Handling Requirements**

POLICY: Tissue or body fluids, etc. removed or collected during any procedure for purposes of Pathologist examination must be taken to the Tissue Laboratory or Clinical Laboratory for processing.

PROCEDURE:

Surgical and Biopsy Specimens - General

- A. Correct handling of pathology specimens is essential for proper diagnosis and patient care. Any questions concerning specimen handling should be addressed to the Pathologist Assistant, who will consult with the Pathologist to ensure proper handling. A Pathologist Assistant is on call 24/7. If the Pathologist Assistant is unavailable or cannot be reached, the Clinical Laboratory should be contacted for assistance.

Phone #s: Pathologist Assistant Tissue Lab Ext. 5768  
(513-5768)  
Beeper 505-5382  
Clinical Lab Ext. 5752  
(513-5752)

- B. The Tissue Laboratory is normally staffed by a Pathologist Assistant Monday through Friday from 0730 until 1600, excluding holidays. Specimens collected during normal hours should be taken immediately to the Tissue Laboratory. Tissue specimens must be received before 1600 to ensure same day processing. Cytology specimens are processed off-site and must be received before 1430 to ensure same day processing. If a physician requires same day processing for a late specimen, the Pathologist Assistant should be contacted.

During normal hours, the Pathologist Assistant is available to assist in assuring proper fixation and handling of tissue specimens. The specimen should be submitted in a leak proof container labeled with the patient name, date collected and specimen source. The specimen is to be left in the Surgical Pathology Specimen refrigerator, and must be entered into the Specimen Refrigerator Accession Log. Information to be logged includes the date, time, patient name, number of containers, specimen source, and initials of the delivering person. All specimens must be accompanied by a completed requisition. See Section C.

During hours when the tissue laboratory is not normally staffed, proper fixation of the specimen is the responsibility of the person delivering the specimen to the Tissue Laboratory. Certain specimens require special handling, such as suspected lymphomas, specimens submitted for culture, vaginal and cervical smears, tissue submitted for frozen section diagnosis and fluids submitted for cytology. See the sections below for special handling. Routine surgery specimens and biopsies are to be submitted immersed in 10% formalin in a 10:1 ratio (or to completely cover larger specimens). The specimen should be submitted in a leak proof container labeled with the patient name, date collected and specimen source. The specimen is to be left in the Surgical Pathology Specimen Refrigerator, and must be entered into the Specimen Refrigerator Accession Log. Information to be logged includes the date, time, patient name, number of containers, specimen source and initials of the delivering person. All specimens must be accompanied by a completed requisition. See Section C.

#### C. Specimen requisition.

The form to be completed depends on the requested pathology services. For tissue specimens the Histology Requisition (blue) should be utilized. For fluids and vaginal/cervical smears, the Cytology Requisition (green) should be utilized. In either case, the requisition should be filled out completely to include:

1. Patient name.
2. Medical record (M) number.
3. Patient location.
4. Patient age.
5. A concise and complete summary of relevant patient clinical history.
6. Pre-op and post-op diagnosis.
7. Specimen source.
8. Date specimen was obtained.
9. All physicians requiring a copy of the report.

#### D. Surgical and biopsy specimens - special handling

Some specimens may require special handling, depending on such factors as pre-op diagnosis, specimen source or indicated testing. Improper handling of these specimens may render them unsatisfactory for diagnostic purposes. If you are unsure of proper handling, please contact the Pathologist Assistant prior to collection.

E. Suspected lymphomas

1. Normal hours

Tissue and fluids collected for suspected lymphomas should be submitted in a sterile container without fixative. To prevent the tissue from drying out, the specimen may be placed on a gauze pad dampened with normal saline. **DO NOT TOTALLY IMMERSE THE TISSUE IN SALINE.** Immediately take the specimen to the Tissue Laboratory. Specimens brought to the Tissue Laboratory for suspected lymphoma must be logged into the Specimen Refrigerator Accession Log and delivered directly to the Pathologist Assistant. **DO NOT LEAVE SPECIMENS FOR SUSPECTED LYMPHOMA IN THE SURGICAL PATHOLOGY SPECIMEN REFRIGERATOR.** All specimens must be accompanied by a completed requisition. See Section C.

2. After normal hours

If a specimen is collected after normal hours and lymphoma is suspected, the Pathologist Assistant should be contacted as soon as possible for information on specimen handling. To prevent the tissue from drying out, the specimen should be placed on a gauze pad dampened with normal saline. **DO NOT TOTALLY IMMERSE THE TISSUE IN SALINE.** If the Pathologist Assistant is not available or cannot be located, contact the Clinical Laboratory. All specimens must be accompanied by a completed requisition. See Section C.

F. Renal and muscle biopsies, chromosome analysis

Renal and muscle biopsies submitted with pre-op diagnosis other than malignancy are routinely referred for outside consultation and diagnosis. All tissue specimens submitted for chromosome analysis are referred for outside consultation and diagnosis. These specimens must be handled according to the rules of the consulting laboratory. They typically require shipping or special transportation, and procedures should not be performed except during normal hours. The tissue should be submitted in a sterile container, and the specimen should be placed on a gauze pad dampened with normal saline. **DO NOT TOTALLY IMMERSE THE TISSUE IN SALINE.** The specimen must be logged into the Specimen Refrigerator Accession Log and delivered directly to the Pathologist Assistant. **DO NOT LEAVE THESE SPECIMENS IN THE SURGICAL PATHOLOGY SPECIMEN REFRIGERATOR.** If the Pathologist Assistant is not available or cannot be located, contact the Assistant is not available or cannot be located, contact the Clinical Laboratory. All specimens must be accompanied by a completed requisition. See Section C.

## G. Frozen section

Frozen section of tissue is typically performed for intra-operative diagnosis, therefore timely results are important. The tissue must be sampled, frozen, sectioned, stained and microscopically examined. CRMC has established a turn around time goal of 20 minutes for frozen section diagnosis. For this reason, the Tissue Laboratory or Pathologist should be notified immediately of the impending delivery of the tissue. For after hours frozen sections, the Pathologist on call should be notified in advance if at all possible.

The specimen should be brought to the Tissue Laboratory in a fresh, moist state with no fixative added. The Pathologist will direct the Pathologist Assistant in sampling of the tissue. The specimen must be logged into the Specimen Refrigerator Accession Log and delivered directly to the Tissue laboratory. **DO NOT LEAVE THESE SPECIMENS IN THE SURGICAL PATHOLOGY SPECIMEN REFRIGERATOR.** If the Pathologist Assistant is not available or cannot be located, contact the Clinical Laboratory. All specimens must be accompanied by a completed requisition. See Section C.

## H. Placentas

The physician will request at delivery if the placenta is to be sent for Pathology. The RN attending the delivery is responsible for relegating the proper care of the specimen. If placenta examination is determined to be necessary, the placenta should be sent to the Tissue laboratory in a blue placenta container placed inside a ziplock bag. The placenta should be delivered to the Tissue Laboratory in a timely manner, and the container should be labeled with the patient name and date of delivery. The specimen is to be left in the Surgical Pathology Specimen Refrigerator, and must be entered into the Specimen Refrigerator Accession Log. Information to be logged includes the date, time, patient name, number of containers, specimen source and initials of the delivering person. All specimens must be accompanied by a completed requisition. See Section C.

## I. Specimens for culture

Pathology specimens occasionally will be submitted with request for culture. Any specimen to be cultured should be handled according to the guidelines of the Clinical Laboratory Microbiology Department. Sterile technique in collecting and transporting these specimens is essential. Fluids should be placed in sterile containers, not in swab tubes. Tissue or tissue fragments are preferred over swabs for culture, as the yield

for micro-organisms is better. However, if swabs must be utilized, the swab should not be allowed to dry out. If anaerobes are suspected, the correct anaerobic swab and transport media should be used.

1. Specimens collected outside OR

Tissue and fluid specimens submitted from the floors for both culture and Pathology examination must be placed in a sterile container without fixative and immediately transported to the Clinical Laboratory. Alert laboratory personnel that both cultures and routine Pathology examination are ordered, so that the culture can be immediately obtained and the proper fixative added to the specimen. The culture order must be placed in the Hospital Information System prior to delivery of the specimen. All specimens must be accompanied by a completed requisition. See Section C.

2. Specimens collected in OR

Tissue and fluid specimens submitted from the OR for both culture and Pathology examination must be placed in a sterile container without fixative and immediately transported to the Tissue Laboratory. After normal hours, the specimen should be taken to the Clinical Laboratory. Specimens brought to the Tissue Laboratory for culture must be logged into the Specimen Refrigerator Accession Log and delivered directly to the Pathologist Assistant. **DO NOT LEAVE SPECIMENS FOR CULTURE IN THE SURGICAL PATHOLOGY SPECIMEN REFRIGERATOR.** The culture order must be placed in the Hospital Information System prior to delivery of the specimen. All specimens must be accompanied by a completed requisition. See Section C.

## J. Cytology specimens

Cytology specimens typically include body fluids, washings and brushings, fine needle aspirates, and vaginal and cervical smears. Many of these specimens are submitted for both cytology and culture. If cultures are ordered along with cytology, see section I.

1. Body fluids, washings and brushings

Normal hours - During normal hours, the Pathologist Assistant is available to assist in assuring proper handling of cytology specimens. The specimen should be submitted in a leak proof container labeled with the patient name, date collected, and specimen source. The specimen is to be left in the Surgical Pathology Specimen Refrigerator and entered into the Specimen Refrigerator Accession Log. Information to be logged includes the date, time, patient name, number of containers, specimen source

and initials of the delivering person. All specimens must be accompanied by a completed requisition. See Section C.

After hours - During hours when the tissue laboratory is not normally staffed, proper handling of the specimen is the responsibility of the person delivering the specimen to the Tissue Laboratory. Saccomono fluid must be added to body fluids and washes in a 1:1 ratio with the body fluid (equal parts of body fluid and Saccomono's). Brushings can be submitted by clipping the brush, dropping it in a small container, and totally immersing it in Saccomono's. Saccomono fluid can be obtained from the Clinical Laboratory Microbiology Department. The specimen should be submitted in a leak proof container labeled with the patient name, date collected and specimen source. The specimen is to be left in the Surgical Pathology Specimen Refrigerator, and must be entered into the Specimen Refrigerator Accession Log. Information to be logged includes the date, time, patient name, number of containers, specimen source, and initials of the delivering person. All specimens must be accompanied by a completed requisition. See Section 1 C.

## 2. Fine needle aspirates

Normal hours - supplies for collecting fine needle aspirates can be obtained from the Pathologist Assistant. After hours, supplies can be obtained from the Clinical Laboratory. For fine needle aspirates sent for cytology studies, follow these steps:

- a. After obtaining the aspirate, make at least 4 (four) smears onto clean slides.
- b. One-half of the smears should be IMMEDIATELY fixed by placing the slide in the provided coplin jar filled with alcohol, or IMMEDIATELY sprayed with cyto-fix. Delay in fixation will impair interpretation.
- c. The remaining smears should be allowed to air-dry.
- d. Any remaining aspirate should be transferred into a small container in equal parts with Saccomono fluid.
- e. Air-dried and spray-fixed smears should be transported in covered slide holders. Alcohol-fixed smears should remain in the coplin jar.

The specimen should be labeled with the patient name, date collected, and specimen source. The specimen is to be left in the Surgical Pathology Specimen Refrigerator, and must be entered into the Specimen Refrigerator Accession Log. Information to be logged includes the date, time, patient name, number of containers, specimen source and initials of the delivering person. All

specimens must be accompanied by a completed requisition. See Section C.

3. Urine

The specimen volume should be 50 ml. A fresh specimen is preferred and should be placed in a screw cap or leak proof container. The specimen should be labeled with the patient name, date collected and specimen source and brought immediately to the Tissue Laboratory or Clinical Laboratory. Laboratory personnel should be alerted to the arrival of the specimen so that proper fixative can be added. Saccomono fluid should be added to the specimen in a 1:1 ratio. All specimens must be accompanied by a completed requisition. See Section C.

4. Sputum

The nurse, doctor, or respiratory therapy personnel are responsible for collecting the specimen. The specimen of choice is an early morning specimen after the patient awakens. The specimen should be labeled with the patient name, date collected and specimen source and brought immediately to the Tissue Laboratory or Clinical Laboratory. Laboratory personnel should be alerted to the arrival of the specimen so that proper fixative can be added. Saccomono fluid should be added to the specimen in a 1:1 ratio. All specimens must be accompanied by a completed requisition. See Section C.

5. Vaginal and cervical smears

The patient should not have any intravaginal examinations, douches or therapy of any kind for 24 hours prior to obtaining gynecology specimens. Lubricant should not be introduced into the vagina, as it interferes with the staining reaction and may render the smear unsatisfactory.

a. Cervical smear

Scrape the entire portio vaginalis uteri, especially the borders of any erosion, with a wooden spatula or Ayres spatula. Spread the material collected on a slide labeled in pencil with the patient name. While the smear is still wet, immediately fix the smear with cyto-fix spray.

b. Vaginal smear

Introduce a cotton swab into the posterior vaginal fornix and rotate slightly. Spread immediately on a slide in a rolling fashion. The slide should be labeled in pencil with the patient name. While the smear is still wet, immediately fix the smear with cyto-fix spray.

c. Endocervical smear

The endocervical sample is usually obtained with a commercially available endocervical brush. It is

recommended that this procedure not be performed on pregnant patients. The endocervical brush is rolled onto the slide from one edge to the other near the end most distant from the labeling area. The slide should be labeled in pencil with the patient name. While the smear is still wet, immediately fix the smear with cyto-fix spray .

During normal hours, the specimen should be brought to the Tissue Laboratory. After hours, the specimen should be brought to the Clinical Laboratory. A completed requisition should accompany the specimen. The requisition should be filled out completely to include:

1. Patient name.
2. Medical record (M) number.
3. Patient location.
4. Patient age.
5. A concise and complete summary of relevant patient clinical history, including the day of last menstrual period, pertinent surgery, exogenous hormone therapy, hormonal status, IUD use, DES exposure, previous abnormal pap/tissue biopsy, date of last known pap and any other pertinent clinical history.
6. Pre-op and post-op diagnosis.
7. Specimen source.
8. Date specimen was obtained.
9. All physicians requiring a copy of the report.

PREPARED BY: Marianne S. Welch/Bob Lynch 05/23/05

APPROVED BY: \_\_\_\_\_ DATE \_\_\_\_\_  
(Medical Director)

APPROVED BY: \_\_\_\_\_ DATE \_\_\_\_\_  
(Clinical Director)