

1.TITLE : Specimen reception, accessioning & handling

2.PURPOSE:

To provide criteria for reception, registration and handling of surgical pathological specimens.

3.POLICY :

3.1. All specimens must be delivered to the laboratory immediately (within 1 hour maximum) with a completed requisition form.

3.2. All requisition forms must be labeled with the correct information of the patient as follows:

3.2.1. Name of Patient.

3.2.2. Age, Date of Birth, Sex.

3.2.3. Medical Record Number

3.2.4. Date and Time of Collection

3.2.5. Type of Specimen (anatomic site)

3.2.6. Location of the Patient

3.2.7. Clinical history of the patient

3.2.8. Pre/post operation diagnosis

3.2.9. The requesting physician's name.

3.2.10. Physician or authorized person's signature on the request form.

3.2.11. Name and address of physician (for referral laboratories).

3.3. Specimen container must be labeled with the correct information of the patient as follows:

3.3.1. Full patients name.

3.3.2. Medical record number.

3.3.3. Age and sex of the patient.

3.3.4. Type of specimen (Anatomic site).

3.3.5. Date and time of collection.

3.3.6. Location of the patient.

3.4. Specimen Identity / Labeling: The identity of every specimen is maintained at all time (for Frozen Section and Permanent Section) during the processing and examination steps with two identifiers. (MRN & pathology number):

3.4.1. The case accession number (example - S13-000) identifying the case.

3.4.2. The case specimen number if there are multiple specimens for the same patient case are labeled alphabetically as A, B, C etc.

3.4.3. The specimen block number if there are multiple blocks on the same specimen – labeled numerically A1, A2, A3 etc.

3.4.4. In addition to the block data, slides are further uniquely identified by the following data that must appear on the label (if applicable):

-The block slide number if there are multiple slides cut from a single block – numerically as 1,2,3 etc.

3.4.5. Stained Slides will be identified by two numbers (medical record number and Pathology number) with permanent marker / pen.

3.4.6. Recuts slides, levels will be identified by ‘recut’, Deeper will be identified by “deeper”.

3.4.7. All slides other than those stained by hematoxylin and eosin stain will bear the name of the stain.

3.4.8. Quadramed maintains records of the number of blocks, slides, and stains prepared and it is capable of demonstrating volumes for any given time.

3.5. All specimens and requisition forms are double checked before acceptance.

3.6. The Laboratory has the right to reject any specimen that does not meet the necessary requirements (**refer to Histo-Form 048**).

3.7. Specimen rejection criteria: Instances where samples are rejected include.

3.7.1. Unlabeled or wrong label on the specimen.

3.7.2. Incomplete patient information/clinical history.

3.7.3. Left unfixed or unrefrigerated for an extended period.

3.7.4. Putrefied or autolyzed specimens.

3.7.5. Damaged specimen or broken slides.

3.7.6. Insufficient sample for processing.

3.7.7. Spilled or contaminated specimens.

3.7.8. Failure of the requesting physician to enter the request in the computer.

3.7.9. Empty containers without the specimen or form.

3.7.10. Referral Pathology consultation material without Histopathology report of referring hospital.

3.8. Sub-optimal specimens (unlabeled, not labeled with two patient identifiers, unaccompanied by adequate requisition information, left unfixed or unrefrigerated for an extended period, received in a container/bag with a contaminated outside surface) are processed

after resolving and informing the physician who send the specimen with detail records of rejected and resolved criteria and this will be documented in the final report under comment.

3.9. All specimens from outside the hospital except those from government hospital must have the approval of the Hospital administration and consultant on duty before they are accepted for processing.

3.10. Requests for **frozen section** require 24 hours' notice ahead of the operation.

3.11. All In-patients for histopathological diagnosis must have their laboratory tests entered and collected in the computer by the attending physician.

3.12. Histopathology requisition form (Lab 1-A) must be duly completed and submitted with the specimen.

3.13. Accessioning of collected specimen is carried out in the laboratory reception area by the technologist(s). (Refer to LIS Procedure manual).

3.14. Specimen should be immersed in fixative (10% **buffered formalin**) within 1 hour of the biopsy or resection procedure. The volume of the formalin should be at least 10 times the volume of the specimen. The 10% buffered formalin is available at Histopathology laboratory.

3.15. All specimens must be received fixed in 10% neutral buffered **formalin** **EXCEPT** for the following:

3.15.1. Frozen section-unfixed, fresh state.

3.15.2. Immunofluorescence – (Renal and Skin biopsies) either in saline or liquid nitrogen.

3.15.3. Electron microscopy- 2% glutaraldehyde solution in the cold after excision.

3.16. SPECIAL PROCEDURE FOR SPECIFIC SPECIMEN:

3.16.1. For **Renal biopsies** advance notice must be sent to the laboratory.

- Please call on (Ext.3150) 15 minutes before the procedure. The sample should be immersed in saline.
- A pathology resident will be available on site to handle the specimen.
- The specimen will be examined under the dissecting microscope for the presence of glomeruli ;then divided into 3 parts, one

frozen for immunofluorescence, one immersed in glutaraldehyde for EM study, and one fixed in formalin for paraffin processing.

- Alternatively, 3 separate samples could be sent to the Histopathology laboratory.
- These specimens should be sent to the lab within one hour after the renal biopsy procedure. The specimen in saline should be immediately snap frozen in liquid nitrogen for further frozen sectioning and immunofluorescence staining.

3.16.2. For **Testicular biopsies** please use Bouin's fluid as a fixative, available at Histopathology laboratory.

3.16.3. **Electron microscopy** sample, add 4% glutaraldehyde solution and refrigerate. Sent to the lab as soon as possible.

3.16.4. **Breast Lump**: The surgical margins should be oriented by sutures.

3.16.5. **Mastectomy**: The apical nodes should be indicated by sutures. Superior margin to be indicated by a separate suture in case of simple mastectomy (without axillary dissection).

3.16.6. **Sentinel lymph node/nodes** identified by the surgeon and removed, will be submitted to the laboratory in a separate container, with a requisition. Surgeons are requested to provide all relevant information on the requisition, including procedure type, date and time of injection, location of lymph node/nodes, tracers used and radioactivity count.

Perinodal fat - Whenever possible, include surrounding fat. This will ensure the integrity of the lymph node capsules and also assess the tumor spread beyond the lymph node capsule.

3.16.7. **Infective Specimen** - Known infective specimen should be clearly marked with red Marker (e.g. patient's with hepatitis, HIV, T.B., etc.).

3.16.8. **Bowel Resection** - The proximal or distal excised margins should be oriented by a suture.

3.16.9. **Skin Biopsies** intended for immunofluorescent are received frozen from the dermatology department then stored in the deep freezer for immunofluorescence studies.

3.16.10. Tiny and small biopsies from Endoscopy and dermatology are normally submitted for processing on the same day, if received before the cut-off time i.e., before 2.00 P.M. and if they appear to be fixed.

3.17. Specimens are usually kept at room temperature for at least two weeks after the official report is released and then disposed according to Hospital and Municipality protocol on proper specimen disposal.

3.18. Referral slides/blocks must be accompanied by the official original pathology report with the following information: (Extra-Departmental Consultation).

3.18.1. Patient's name

3.18.2. Medical Record Number

3.18.3. Hospital / clinic pathology number

3.18.4. Number of slides/ blocks.

3.19. Surgical specimen to be **“Exempt from Pathology Examination”** as approved by the Chairperson Department of Pathology in conjunction with the hospital administration and medical staff departments, are :

- Foreign bodies (e.g. bullets, medical devices, IUD, valve rings).
- Hair, finger nails, toe nails removed for cosmetic reason.
- Teeth, dental appliances.
- Lens (i.e. cataract).
- Calculi.
- Nasal septum cartilage and bone (soft tissue is submitted for microscopic examination).
- Foreskin from circumcision (10 years old and younger).
- Mammary implant.
- Skin from face-lifts.
- Orthopedic materials.

3.20. Specimens accepted for **“Gross Description Only”**

- Torn Meniscus.
- Varicose veins.
- Bone fragments from non-pathologic fracture.
- Ear cartilage.
- Fetus.

Irrespective of any exemptions, Microscopic examination should be performed whenever there is a request by the attending physician, or at the discretion of the pathologist when indicated by the clinical history or gross findings.

3.21. SPECIAL SAFETY PRECAUTIONS

- 3.21.1. All surgical specimens are considered highly infectious.
- 3.21.2. Small specimens must be sealed in a biohazard labeled bags.
- 3.21.3. Large specimens must be covered tightly to ensure no leak.
- 3.21.4. All precautions must be considered to avoid inhaling fixative.
- 3.21.5. Requisition form should be clean of blood and fixative at all times.

4.RESPONSIBILITY :

4.1. All Histopathology laboratory staff

4.2. O.R, Day surgery, ER OB/Gyn, Ultrasound procedure area, Dental department and referral laboratories.

5.ATTACHMENT :

5.1. Lab.Med-HIST-048 Specimen Rejection Record

5.2. Lab.Med.HIST-031 Daily work sheets.

6.DISTRIBUTION :

6.1. LMD Administration Office

6.2. Histopathology Laboratory Section

6.3. DQSA

7.REFERENCES :

7.1. Theory and practice of Histological Techniques – John D.Bancroft.

7.2. College of American Pathologist (CAP) Checklist 2014.