CYTOPATHOLOGY

Phone: RGH Cytology Department: 922-4431

Hours: Monday – Friday, 8:00 a.m. - 5:00 p.m.

Responsibility:

The Cytology Laboratory prepares cellular samples for light microscopy, and evaluates those samples, primarily for the identification of pre-malignant and malignant cell changes. Specimen types include body fluids, fine needle aspiration of tissue, and pap tests.

Who to Call:

The Department Manager or a Cytotechnologist is available Monday – Friday, 8:00 a.m. - 5:00 p.m. At all other times, please call the pathologist "on call" through the page operator.

Director of Cytopathology: Karen M. Clary, MD. 922-3632
Cytopathology Manager: Elizabeth Parker, BS, CT (ASCP).....922-9879

Specimens are submitted to Cytopathology for the interpretation of pathologic conditions, primarily cancer. Cytologic examination may also reveal information about inflammatory conditions, fungi, bacteria and some viruses. Specimens submitted are fresh body fluids, brushings, swabs, scrapings, or aspirations. Additionally, specimens may be submitted as microscopic slide specimens, such as pap tests and aspiration biopsy specimens.

Specimen Identification:

It is the responsibility of the clinician to ensure specimens are properly identified as to patient and specimen type. The body fluid container (not the container lid) must have patient full name and date of birth. Glass slides submitted must have the patient full name and date of birth in pencil, on the frosted edge of the slide.

Preservation of Specimens:

Specimens are collected without preservatives or other additives. Refrigerate specimens if transportation is delayed more than an hour. All glass slides should be placed in Pap Smear Fixative (95% ETOH). All liquid-based pap smears must be submitted in the preservative vial that is provided by the laboratory.

Transportation of Specimens:

Outpatient specimens: Rochester Regional Health (922-LABS), provides free specimen pickup, on pre-arranged schedules. Special transportation may be arranged as well.

Inpatient specimens: Delivered directly to the laboratory.

Body fluid/fresh specimens must be transported in a sealed biohazard bag, with the patient requisition placed in the pocket flap.

Requisitions: The clinician must ensure the requisition is complete, including:

1. Patient name
2. Date of birth
3. Demographics
4. Attending/ordering physician
5. Date specimen was obtained
6. Pertinent Billing Information.
7. Pertinent clinical history
8. Specify anatomic site of specimen

    Note: Multiple sites of the same procedure (e.g.: aspiration biopsy at 2:00 and 4:00 must be specified as such to provide for site specific reporting.

9. Specify collection method (brush, broom, catheter, aspiration, discharge, induced sputum, etc.).
10. Clinical findings on examination (mass, adenopathy, friable cervix, x-ray/CAT findings, CHF, infections, etc.)
11. Previous clinical history (malignancy, cirrhosis, effusions, radiation / chemotherapy).

GYN Pap Test Specific Requisition Information:

12. Date of the first day of menses, for the last known menstrual period (LMP).
13. Exogenous hormone use, and
14. Clinical history of induced menses (even though patient may be P.M., if being cycled with ERT, please give dates).
15. Clinical findings on pelvic exam (mass, erosion, post menopausal bleeding, friable cervix)

Special Stains for Cytopathology Specimens:

These are ordered by Laboratory personnel only. Providing the appropriate clinical information will ensure the proper tests are ordered in a timely manner.

Report Terminology:

The Cytopathology Division uses descriptive terminology in reporting non-Gyn pathologic conditions. The Bethesda system, or modification thereof is used for all Pap test diagnosis.

Result Reporting:

All patient reports are delivered to the patient's physician or clinic, upon completion of the testing. Fax/phone reporting is utilized on "Rush / STAT" specimens.

Follow-Up Letters:

As per NYS-DOH regulations, we will send letters requesting follow-up information on all GYN cases of Squamous Intraepithelial Lesions and more serious diagnosis when follow-up is not apparent in the laboratory database.

Requisition and Supplies:

For supplies call 922-LABS or give a completed form to the courier:

GYN requisitions	Pap test vials	Microscopic slides
Non-GYN requisitions	Cervical scrapers	Specimen sample containers
Cervical sampling brooms & brushes		95% ETOH Fixative

Note: cytology supplies are not sterile.

Priorities and Turn Around Times:

ASAP: These specimens are given a priority over routine reporting, provided they do not interfere with Stat reporting.

Rush/STAT: Emergency. It is imperative to have immediate reporting for patient care. Specimens receive priority status and will be given same day service for preliminary reporting. A preliminary report can be provided to the clinician within an hour of receipt, if requested. Please clearly indicate who should be contacted with these results and how they can be reached.

Routine Pap Test: Turn around time is generally 3-5 days from receipt of the specimen.

Routine Body Fluids: Are reported routinely within 1-2 days.

Transportation of Specimens:

1. Syringe needles must **never** be transported.
2. Transportation of a body fluid Cytology specimen must be in a closed transport bag.
3. The Cytology requisition must be transported in such a way as to prevent contamination with body fluids, and protect patient privacy.
4. Specimens will be brought to the Cytology Lab. If special circumstances exist, arrangements can be made by phoning (922-LABSor the cytology lab directly 922-4431).
5. Receipt of a routine body fluid specimens during working hours:
   a. By Cytology personnel at the specimen preparation room, located in the Cytology Division, Department of Pathology.
   b. A routine specimen is "received" on the day of delivery, if received prior to 3 pm, Mon - Fri, OR if prior arrangements have been made with Cytology personnel.
6. Receipt of routine body fluid specimens after working hours:
   a. Specimens should be delivered to Specimen Management Department.
7. Specimens delayed for delivery to the Cytology division should be refrigerated until delivery, but not allowed to freeze.

Adequacy of the Specimen:

Note: If abnormal cells are detected, the specimen is **never** categorized as "unsatisfactory" for interpretation.

Four elements compromise the adequacy of the specimen for the detection of abnormalities:

1. **Patient and Specimen Identification:** Correct specimen identification is essential for accurate evaluation. Further, proper identification of the patient enhances the ability of the laboratory to locate prior records and slides from the patient that may influence the current evaluation.

2. **Pertinent Clinical Information:** The provision of pertinent clinical information should increase the sensitivity and reliability of the evaluation. This data may clarify otherwise uncertain cytologic findings, and laboratories often use this information to select cases for special review. A specimen lacking pertinent clinical information may not receive the extent of review or clinical correlation it would have received had that information been provided.

3. **Technical Interpretability:** The cellular constituents must be interpretable for diagnostic evaluation. A variety of factors may impair or prevent such an interpretation:

   a. The apparent condition of the specimen indicates that it is unsatisfactory for testing or that it is appropriate for the test required.

   b. It has been collected, preserved or otherwise handled in such a manner that it has become unsatisfactory or unreliable as a test specimen.

c. The slide(s) are broken to such extent that they cannot be repaired adequately so that cells are not obscured or lost.

4. **Cellular Composition and Sampling:** Cellular elements form the microscopic basis for interpretation of pathologic conditions. The microscopic evaluation of cellular elements, clinical history, sampling technique and anatomic site establish the parameters for interpretation.

   a. **Pap Test specific cellular composition: Sampling of the Transformation zone:**
   The specimen must contain both squamous and endocervical or metaplastic cells. These cellular elements form the microscopic basis for evidence that the transformation zone has been sampled. Endocervical component as a measure of specimen adequacy is still inconclusive, and further, the presence of squamous and glandular cells does not guarantee adequate sampling of the transformation zone. (i.e.: an optimal specimen from a post menopausal patient may lack endocervical cells.)

   The pap test is a screening test for cervical cancer. As such it has an inherent false negative rate

The clinician ultimately determines what is "adequate sampling" for an individual patient, based on integrating information from the clinical history, visual inspection of the cervix, and the cytopathology report.