



## Department of Pathology and Laboratory Medicine

### CYTOLOGY SPECIMENS- COLLECTION, PREPARATION AND PRESERVATION

#### GENERAL COLLECTION INSTRUCTIONS:

A completed test requisition must be sent with each specimen. Fill out the form in detail giving the patient's name, address, date of birth, social security number, doctor's name, and insurance information. We must have this information in order to begin processing. Identify the type of specimen on both the requisition and the container. It is also very important for you advise us of any pertinent clinical information about the patient.

If the specimen is a Pap smear, the patient's age and date of last menstrual period (LMP) must be given. Please also supply any information that would indicate if the patient is at high risk for developing cervical neoplasia. Examples of this would be "history of dysplasia" or "previous abnormal Pap". The form also provides an area for you to quickly check off other items of information that will help us in our evaluation of the case.

#### GYNECOLOGIC SPECIMENS

**MATERIALS:** SurePath specimen collection kits and Cytology requisitions.

The pap smear should be taken two weeks after the first day of the patient's last menstrual period and if possible, not during menstruation. Heavy bleeding can obscure cellular detail. Do not clean the cervix with saline prior to collecting the sample – that could result in cellular distortion or a reduced number of cells. If excessive mucus is present, it can be removed by placing a small piece of sterile gauze over the cervix and gently removing it after it absorbs the exudate.

The optimal cervical specimen includes sampling of the squamous and columnar cells of the cervix, particularly from the transition zone where many cervical lesions seem to develop.

#### SUREPATH PAPS

1. Prepare patient as you would for a conventional pap.
2. Using the provided SurePath collection devices, obtain material from the transition zone of the cervix and endocervical canal.
3. Quickly transfer the specimen to the pre-filled vial of preservative according to the thin-layer protocol.
4. Cap specimen tightly and label with patient's name and DOB.
5. Complete a cytology requisition being careful to include all demographic information and all pertinent clinical information.
6. Place the specimen in a biohazard bag and the requisition in the pocket of the bag.
7. Send specimen to Cytology Lab.

### **SPECIMENS FOR HPV TESTING**

Collect the specimen by the SurePath pap collection method. The HPV test can be performed on the residual fluid in the SurePath vial after the Pap test has been processed. Mark the requisition "For Pap test and HPV test" or "For HPV testing only."

Specimens will be held up to two weeks to allow for reflex testing.

### **SPECIMENS FOR CT/NG TESTING FROM SUREPATH VIAL**

Collect the specimen by the SurePath pap collection method. Mark the requisition for CT/NG testing.

## **NON-GYNECOLOGIC CYTOLOGY SPECIMENS**

Each specimen must be accompanied by a completed test requisition. Label all specimen containers with two patient identifiers (Name and Date of Birth). Use appropriate size container for specimen. Refer to the following table **or on-line specimen collection manual** for proper handling and fixation of specimen. Multiple tests may be ordered on the same specimen in some instances. For instance, Microbiological studies may be requested in addition to Cytology. In this event, the Microbiology Section should get the fresh specimen first. The Microbiology Section will then be responsible for delivering the rest of the specimen to Cytology.

**WEEKEND CASES:** DELIVER TO THE MAIN LABORATORY SPECIMEN RECEIVING AREA.

**MATERIALS:** Slides, plastic containers, fixative, Coplin jars filled with 95% alcohol, cardboard folders, requisitions.

### **SUPERFICIAL FINE NEEDLE ASPIRATES (Breast, Thyroid, Salivary Gland, Lymph Node)**

1. Label slides with patient's name and date of birth.
2. Aspirate specimen. Place bevel of needle against the center of the glass slide and express a small drop of aspirated material.
3. Place a second glass slide on top of the first and allow the weight of the slide to spread the drop.
4. Quickly pull the slides apart.
5. Immediately place the slides into the plastic Coplin jars containing 95% alcohol. An alternate method is spray-fixing. If you spray-fix, allow the slides to dry completely before sealing the cardboard folder to prevent sticking.
6. Make sure the lid on the container is tightly sealed to prevent leaking. Label the container (not lid) with the patient's name, DOB and type of specimen. Identify the specimen type on the requisition.
7. Place container in a plastic biohazard bag and attach a completed requisition.
8. Send specimen to Cytology Lab.

### **URINE/BLADDER WASHINGS**

1. Have the patient drink plenty of fluid before collecting the specimen.
2. Have the patient collect a voided urine sample or collect the specimen through instrumentation.
3. Place the specimen in a plastic container and add an equal amount of Saccamanno (green) fixative.
4. Label container (not lid) with the patient's name, DOB and the specimen type. State specifically whether it is a voided or catheterized specimen.
5. Place the container in a plastic biohazard bag and attach a completed requisition.

6. Send the specimen to the Cytology Lab.

### **BREAST SMEARS (NIPPLE DISCHARGE)**

1. Label slides with the patient's name and date of birth.
2. Gently strip the subareolar area and nipple with the thumb and forefinger.
3. Allow a pea-sized drop of fluid to accumulate on the nipple tip.
4. Touch a clean glass slide to the nipple and draw the slide across the nipple to smear the material.
5. Immediately place the smear into a plastic coplin jar of 95% alcohol. An alternate method of fixation is spray-fixing. If you spray-fix the smears, allow them to dry before sealing the cardboard container to prevent sticking.
6. Repeat procedure until all available secretion is collected.
7. Label container (not lid) with the patient's name and type of specimen, being sure to state specifically "right" or "left" breast.
8. Make sure lid is tightly sealed to prevent leakage. Place the container in a plastic biohazard bag and attach a completed requisition.
9. Send specimen to Cytology Lab.

### **SPUTUM**

1. Explain to the patient that he/she is to collect a sputum specimen first thing each morning for three days.
2. Instruct the patient to rinse his/her mouth with water before each collection.
3. Have the patient to cough deeply and expectorate directly into the containers of Saccomanno (green) fixative. (This is a special fixative that will keep the cells well-preserved until the specimen can be processed.) Instruct the patient to make sure the lid is tight and swirl the container gently to mix the specimen with the fixative. Have the patient bring the specimen to your office.
4. Make sure the container is labeled with the patient's name, DOB and type of specimen.
5. Place the container in a plastic biohazard bag and attach a completed requisition.
8. Send specimen to the Cytology Lab.

### **MISCELLANEOUS CYST AND NODE ASPIRATES**

1. Aspirates are collected by the physician using appropriate sterile technique.
2. Aspirates may be submitted in the syringe with which the physician aspirated the specimen. The needle should be removed and the syringe cap replaced and taped securely. The syringe must be properly labeled with the patient's name, date of birth and specimen type.
3. Aspirates may be transferred from the syringe to a plastic specimen container which has been properly labeled with patient's name, DOB and specimen type and submitted "fresh" to the laboratory.
4. Physicians may prepare smears from aspirates and submit the smears in 95% ethyl alcohol or pre-filled Saccamanno (green) fixative containers provided by the Cytology department.
5. Sterile containers are necessary only when microbiologic studies are requested on the same specimen.
6. Send unfixed specimens immediately to the laboratory. Store the specimen in refrigerator to inhibit cellular degeneration.

### **MISCELLANEOUS SMEARS**

1. Label slides with patient's name and date of birth.
2. Scrape lesion with spatula and prepare as many smears as possible.

3. Spray-fix immediately or quickly place the smears into a plastic Coplin jar containing 95% alcohol. If spray-fixing, allow the smears to dry before sealing the folder.
4. Label the container or cardboard folder with the patient's name, DOB and specimen type.
5. Place the container in a plastic biohazard bag and attach a completed requisition.
6. Send specimen to Cytology Lab.