

## **COLLECTION AND FIXATION OF NON-GYNECOLOGIC CYTOLOGY SPECIMENS**

Puget Sound Institute of Pathology will supply appropriate containers and fixative for collection of patient specimens. A Pathology Requisition form should be filled out completely for each specimen submitted, specifying it is for cytology.

### **INSTRUCTIONS FOR COLLECTION OF FLUID SPECIMENS**

Pleural fluid	Synovial fluid
Pericardial fluid	Breast cyst fluid
Abdominal fluid	Bronchial washings
Culdocentesis fluid	

Immediately add the fluid specimen to a plastic pre-filled container of CytoLyt fixative. If the total volume is large (i.e. effusions, washes, urines) immediately secure a well mixed 100 ml aliquot and add to an equal volume of CytoLyt in a plastic container.

If CytoLyt is not available, specimens may be added to an equal volume of 70% isopropyl (rubbing) alcohol in a clean container.

### **INSTRUCTIONS FOR COLLECTION OF SPUTUM SPECIMENS**

The plastic containers with CytoLyt can be sent home with the patient for collection of sputum specimens. Please instruct the patient as follows:

**Sputum** is material from the lungs and is obtained by deep coughing.

**Saliva** is fluid in the mouth and is of no value in this test.

**Post-nasal drainage** comes from the nose and settles in the throat, especially at night. This thick material, which is not sputum, must be cleared from the throat before collecting the sputum sample.

#### **Directions**

1. Label the container with name and date.
2. Upon awakening in the morning and before breakfast, clear throat if necessary and discard this material. Rinse mouth with water and discard.
3. Breathe deeply 8 to 10 times and cough deeply to bring up the sputum from deep in the chest.
4. Spit into the container, seal the lid and shake briskly for a few seconds to break up mucous.
5. With each addition of sputum, shake briskly.
6. Sputum may be collected for 24 hours and added to the same container.
7. Bring the specimen with requisition slip to the laboratory or the doctor's office for pick up.

Copies of these instructions will be supplied on request to give to the patients.

## **INSTRUCTIONS FOR COLLECTION OF URINE SPECIMENS**

A catheterized specimen is highly recommended for all female patients to avoid vaginal-perineal contamination and is preferable for male patients. However, voided urine from the male is usually adequate. When a lesion in the kidney or ureter is suspected, ureteral specimens are desirable. The specimen must be immediately mixed with an equal amount of CytoLyt. If the total volume is large, immediately secure a well-mixed 100 ml aliquot and add an equal volume of fixative. First morning urines are to be avoided since exfoliated cells have set in the bladder for many hours and are often degenerated.

## **INSTRUCTIONS FOR COLLECTION OF CEREBROSPINAL FLUID SPECIMENS**

After obtaining the specimen and apportioning for other required tests, add all remaining fluid (at least 1 ml) to equal amounts of CytoLyt. 10 ml tubes containing 2 ml of fixative are provided for collection. It is important to keep the amount of spinal fluid and fixative equal in order to prevent dilution of specimen.

## **INSTRUCTIONS FOR HANDLING BRUSHINGS FOR CYTOLOGY**

Write the patient's name in pencil on the frosted end of a glass slide.

Wet the brush in saline prior to obtaining the specimen. Wooden tongue blades are too blunt and do not yield deep cells.

Set out several frosted end glass slides and label with the patient's name.

Scrape the inside of the cheek for a buccal smear, or scrape the oral or skin lesion firmly. Moistening skin lesions with sterile saline prior to scraping may help loosen the cells.

Rapidly spread the material on the slide and immediately immerse in a bottle containing 95% Alcohol Fixative for Cytology Smears (green label). Any air-drying will result in an unsatisfactory smear. Alternatively, the smears may be immediately flooded with the cytology fixative from the Pap-Pak kit.

## **INSTRUCTIONS FOR HANDLING SCRAPINGS FOR CYTOLOGY – BUCCAL SMEARS, ORAL LESIONS, SKIN LESIONS**

A stainless steel spatula is ideal for obtaining the specimen. Wooden tongue blades are too blunt and do not yield deep cells.

Set out several frosted end glass slides and label with the patient's name.

Scrape the inside of the cheek for a buccal smear, or scrape the oral or skin lesion firmly. Moistening skin lesions with sterile saline prior to scraping may help loosen the cells.

Rapidly spread the material on the slide and immediately immerse in a bottle containing 95% Alcohol Fixative for Cytology Smears (green label). Any air-drying will result in an unsatisfactory smear.

Alternatively, the smear may be immediately flooded with the cytology fixative from a Pap-Pak kit.

### **INSTRUCTIONS FOR COLLECTION OF SMEARS FROM NIPPLE**

Gently press subareolar area and nipple with thumb and forefinger. Do not massage the breast. If secretion occurs allow only a drop the size of a pea to accumulate on the apex of the nipple.

Support areola and nipple with one hand. With the other hand, place slide immediately on nipple, touching drop to slide, then draw slide quickly across nipple, and IMMEDIATELY drop the slide into bottle of 95% Alcohol Fixative for Cytology (green label) or immediately flood slide with the cytology fixative from the Pap-Pak kit.

Repeat procedure until all secretion is utilized. If clinically indicated, repeat procedure with other breast.

If there is nipple erosion or ulceration without nipple secretion, physiologic saline can be gently mixed with lesion to exfoliate cells. Smears are made as above.