CompuNet
CLINICAL LABORATORIES

COLLECTION OF NON-GYNECOLOGIC CYTOLOGY SPECIMENS

Accurate Cytologic diagnosis of a malignant condition can only be accomplished if the specimen collection process achieves maximum cell preservation. These are short procedures for providing an optimal specimen that can be used to achieve a diagnosis of clinical conditions.

- **ANAL PAP/ANAL NON-GYN CYTOLOGY**

The sample is acquired blindly, without visualization of the squamo-columnar transition of the anus using a water-moistened Dacron swab. This swab is inserted 1 to 1.5 inches into the anal canal and is rotated firmly as it is being pulled out of the canal [1]. The squamo-columnar transition zone is about 2 cm (1 inch) from the anal verge. The swab is then rinsed into Thin Prep vial. The swab should be vigorously rotated in the Thin Prep Pap vial (minimum of 10x). The swab can be discarded after rinsing in vial. A pathology requisition should be completed with “Anal Pap” indicated in the non-gynecological section of the requisition. HPV/DNA reflex testing is not available for Anal Paps.

- **BILIARY DRAINAGE**

Specimen is collected in Endoscopy during an endoscopic procedure. Entire specimen is submitted fresh to the Cytology department.

- **BREAST DRAINAGE (NIPPLE DISCHARGE)**

Nipple secretions should be placed on a glass slide and immediately sprayed with cytology fixative. The patient’s name MUST be written in pencil or slide marker on the frosted end of the glass slide along with location of discharge. Place the slide(s) in a cardboard slide transport folder and send to the laboratory.

- **BRONCHIAL BRUSHING**

Brush material is collected at the time of the bronchoscopy. Prepare air dried smears directly from the brush. The patient’s name MUST be written in pencil or slide marker on the frosted end of the glass slide along with source of specimen. After allowing the slide(s) to air dry, place the slide(s) in a cardboard slide transport folder. Clip and place the brush in 30ml CytoLyt (Cytology) fixative. Submit the prepared glass slide(s) and brush in fixative to the laboratory.

- **BRONCHIAL LAVAGE**

40ml to 80ml of lavage fluid is collected during a bronchoscopy procedure. A fresh portion of this is added to 30ml CytoLyt (Cytology) fixative ∗ and sent to the laboratory specifically for cytology’s tests.

- **BRONCHIAL WASHING**

Secretions are collected in a Luken's trap at the time of bronchoscopy. A portion of this is added to 30ml CytoLyt (Cytology) fixative ∗ and sent to the laboratory specifically for cytology's tests.

- **CEREBROSPINAL FLUID**

Specimen is collected at the time of lumbar puncture and placed in the CSF collection tubes. Fresh specimen must be sent to the Laboratory immediately. Unless otherwise specified by the physician, Cytology will be performed on tube 3.

- **CULDOCENTESIS FLUID**

Fluid collected during a culdocentesis procedure is added to 30ml CytoLyt (Cytology) fixative∗ and submitted to the laboratory.

- **ESOPHAGEAL BRUSHING**

The specimen is collected on brushes during an esophagoscopy procedure. Air-dried smears should be prepared from the brushes. Allow the slide(s) to air dry. The patient's name MUST be written in pencil or slide marker on the frosted end of the glass slide along with source of specimen. Place the slide(s) in a cardboard slide transport folder and send to the laboratory. The brushes should be clipped and placed in 30ml CytoLyt (Cytology) fixative and submitted along with the prepared slides.

- **ESOPHAGEAL WASHING**

Esophageal secretions collected during esophagoscopy should be placed in 30ml CytoLyt (Cytology) fixative∗ and sent to the laboratory.

- **FINE NEEDLE ASPIRATION (PALPABLE MASSES, MISC. SOURCES)**

Material expressed from the aspiration needle should be placed directly on clean glass slides. Fixed and airdried smears should be prepared. To fix smears, spray immediately with the cytology spray fixative or placed in 95% alcohol. Allow to air dry. The patient's name and other identifier (DOB or site) MUST be written in pencil or slide marker on the frosted end of the glass slide. Place the slide(s) in a cardboard slide transport folder and send to the laboratory. The needle should be rinsed in 20ml 10% Formalin container and submitted along with the prepared slides. Ideally thyroid specimens should have 4 passes with two slides and needle rinse for each pass.

- **FINE NEEDLE ASPIRATIONS (NON-PALPABLE MASSES, MISC. SOURCES)**

Fine needle aspiration specimens of non-palpable masses are usually collected by the radiologist using radiographic guidance or in the endoscopy department. Fixed and air-dried smears are collected and

placed in plastic or cardboard transport folders. The needle and syringe are rinsed in 20ml 10% Formalin container and submitted with the slides. The frosted end slides, plastic or cardboard transport folders, and 10% formalin container are supplied by the Cytology Department. Quick assessment requested for procedures are handled by the Cytology department which is applicable to UVMC, Atrium, MVH North, MVH South, and MVH main campus locations.

- **GASTRIC BRUSHING**

The specimen should be collected on brushes during an endoscopy procedure. Air-dried smears should be prepared from the brushes. Allow the slide(s) to air dry. The patient's name MUST be written in pencil or slide marker on the frosted end of the glass slide along with source of specimen. Place the slide(s) in a cardboard slide transport folder and send to the laboratory. The brushes should be clipped and placed in CytoLyt (Cytology) fixative and submitted along with the prepared slides.

- **MISCELLANEOUS FLUID**

Any volume of miscellaneous fluid collected for cytologic examination should be placed in 30ml CytoLyt (Cytology) fixative∗ and submitted to the laboratory.

- **ORAL/MUCOSAL SCRAPING**

Scraping from the margin of an oral lesion should be placed directly on a clean glass slide and immediately sprayed with cytology fixative. Allow the slide(s) to air dry. The patient's name MUST be written in pencil or slide marker on the frosted end of the glass slide along with source of specimen. Place the slide(s) in a cardboard slide transport folder and send to the laboratory.

- **PERITONEAL WASHING**

The specimen is collected in surgery during a laparotomy or laparoscopy procedure. The specimen should be placed in 30ml CytoLyt (Cytology) fixative∗ and submitted to the laboratory.

- **PERICARDIAL FLUID**

10 to 1000ml of fluid obtained during a paracentesis procedure of the pericardial cavity should be submitted in a vacuum bottle. No heparin or fixative is added. Fluid can be placed in 30ml Cytolyt∗ if less that 50ml of specimen is collected. The specimen should be sent to the laboratory immediately.

- **PERITONEAL FLUID (ASCITES)**

10ml to 1000ml of fluid obtained during a paracentesis procedure of the peritoneal cavity should be submitted in a vacuum bottle. No heparin or fixative is added. Fluid can be placed in 30ml Cytolyt∗ if less that 50ml of specimen is collected. Specimen should be sent to the laboratory immediately.

- **PLEURAL FLUID**

10ml to 1000ml of fluid is obtained during a thoracentesis procedure and should be submitted in a vacuum bottle. No heparin or fixative is added. Fluid can be placed in 30ml Cytolyt∗ if less that 50ml of specimen is collected. The specimen should be sent to the laboratory immediately.

- **SKIN SCRAPING**

A scraping from the margin of the lesion should be placed on a clean glass slide and immediately sprayed with cytology fixative. Allow the slide to air dry. The patient's name MUST be written in pencil or slide marker on the frosted end of the glass slide along with specimen source. Place in a cardboard slide transport folder and send to the laboratory.

- **TZANCK TEST**

Performed to identify the presence of herpes simplex, herpes genitalis, herpes zoster, varicella and pemphigus vulgaris in vesicular or bullous lesions. Scrapings from the base of the lesion should be placed directly on a clean glass slide and immediately sprayed with cytology fixative. Allow the slide(s) to air dry. The patient's name MUST be written in pencil or slide marker on the frosted end of the glass slide(s) along with specimen source. Place the slide(s) in a cardboard transport folder and send to the laboratory.

- **SPUTUM**

Several deep cough specimens collected sequentially should be placed into 30ml CytoLyt (Cytology) fixative∗. Deep cough specimens should be collected over a short period of time and not over a 24-hour period. If microbiology studies are desired, a separate specimen must be collected (fixative will destroy any organisms).

- **URINE**

10ml to 50ml of voided or catheterized urine should be placed directly into 30ml of CytoLyt (Cytology) fixative∗ and submitted to the laboratory.

∗ Volume ratio of Cytolyt is no more than 1-part Cytolyt solution to 3-part specimen volume. Mix thoroughly after adding specimen.

∗∗ RPMI preservative is always taken on FNA collection procedures for cases that might need Flow Cytometry as determined by the pathologist.