Cytology Specimens Specimen Collection and Handling

Patient Identification and Specimen Labeling

- A. Specimens must be labeled in adherence to the Specimen / Requisition Label Policy located on the Intranet under Pathology/Laboratory Policies and Procedures.
- B. Specimens are accepted only from physicians or other persons authorized under law.

Cytology Request Form

- A. Forms are available in the clinics and floors or the Hematology Laboratory at ext. 74350.
- B. Forms should include:
 - 1. Name of patient
 - 2. Patient date of birth or age
 - 3. Patient gender
 - 4. Tests ordered
 - 5. Date of specimen collection
 - 6. Source of cytologic material
 - 7. Name and address of submitting clinician
 - 8. Pertinent clinical history
- C. If Cytology Request Form is not submitted with specimen, the laboratory requisition must include all information listed above.
 - 1. The hematology laboratory will complete a Cytology Request Form using the information from the laboratory requisition and submit to cytopathology for review.
 - 2. If a Cytology Request form is not received, a cytoprep will be made and submitted to pathology based on the criteria listed below:
 - a. Any CSF with 5 or more WBCs present on hemacytometer chamber count.
 - b. Any shunt fluid with cytology requested on laboratory requisition.
 - c. All effusions and BAL specimens and cyst fluids.

General Considerations of Specimens

- A. Specimens should be transported STAT to ensure specimen integrity is not compromised. Fluids are processed by the hematology laboratory within 1 hour of receipt, when possible.
- B. Cytopathology review and interpretation should be complete within 2 working days after specimen receipt, as a standard practice.
- C. All specimens should be collected in containers with screw caps and caps tightened securely to prevent leakage when transported. All specimens should be placed in sealed biohazard bags prior to transport.
- D. When syringes are used to obtain cytopathology specimens, needles must be removed and replaced with syringe caps.
- E. All specimens submitted to the hematology laboratory for cell count and cyto preparation are stored in the department for 48 hours.

Cerebrospinal Fluid/Shunt Fluid

- A. The specimen should consist of at least 0.5mL of fluid for cell count and cytology. If chemistry or microbiology tests are requested, additional fluid is required.
- B. If more than one tube of CSF is collected, the tubes must be labeled with order of collection, i.e. 1, 2 and 3 with tube 3 being the last tube collected. Cell count and cytology are performed on tube 3 unless otherwise specified.
- C. Cytology review by pathology is performed on all CSF specimens from the Oncology Department. All other CSF specimens require 5 or more WBCs on hemacytometer chamber count before being submitted to pathology for cytology review, unless specifically requested.
- D. Cytopreps of shunt fluid are made and submitted for pathology review only when requested on the laboratory requisition or Cytology Request Form.

Effusions

- A. Specimens consist of:
 - 1. Ascites or peritoneal fluid
 - 2. Pleural or thoracentesis fluid
 - 3. Pericardial fluid
 - 4. Synovial fluid
- B. The specimen should consist of at least 0.5mL of fluid for cell count and cytology. If chemistry or microbiology tests are requested, additional fluid is required.
- C. Synovial fluids submitted in EDTA anticoagulant are unacceptable for crystal analysis.
- D. Clotted specimens are unacceptable for cell count, but may have slides made by the hematology department and submitted to pathology for review.
- E. Specimens that are extremely viscous or mucoid will not receive a cell count. Cytopreps will be made by the hematology department and submitted to pathology for review.

Cyst Fluids

A. Cyst fluids should be handled the same as effusions.

Bronchoalveolar Lavage (BAL) Specimens:

- A minimum of 10mL of BAL fluid is required for complete microbiology testing, cell count and cytology.
- B. A Bronchoalveolar Lavage Requisition is required to be submitted with each specimen.
- C. BAL specimens that are extremely viscous or mucoid will not receive a cell count. Cytopreps will be made by the hematology department and submitted to pathology for review.