

Cytology Collection Technique – Fine Needle Aspiration Biopsy – Non-image guided (External Client)

ID: CYTO-CYT-COL-C-012	File Name: ccol012.doc
Eff: 02/14/2005	Authorized: C. M. McLachlin

CONTROLLED document. Any documents in paper form must be used for reference purposes only. The on-line copy must be considered the current documentation

Cytology Collection Technique – Fine Needle Aspiration Biopsy – Non-image guided (External Client)Materials Checklist:

1. Cytology requisition with all pertinent clinical and specimen information
2. Glass microscopy slides labeled with the patient name on the frosted end in pencil (NOT pen)
3. 10cc plastic syringe
4. 23 gauge sterile needle (or 25 gauge or smaller if bloody or thyroid)
5. Specimen container with Cytolyt fixative and a Cytology Fixative label
6. Cytospray fixative
7. Cardboard slide folder
8. Alcohol wipes, sterile gauze, gloves
9. Biohazard Specimen Transport Bag

(For materials ordering see Cytology Materials List File name:[ecol015.doc](#))

Aspiration Technique

After appropriate explanation to, and consent from patient...

1. Inspect lesion location, noting proximity to lung apex, chest wall and / or large blood vessels.
2. Clean skin over lesion with alcohol wipe.
3. Stabilize lesion between fingers of your one hand, keeping skin taut.
4. Insert needle into lesion, pull plunger of syringe back to get vacuum effect and make excursions back and forth in one plane for about 10 seconds, or until blood is seen at the needle hub.
5. Release plunger of syringe, then pull needle out of lesion.
6. Apply gauze with pressure at puncture site.
7. Prepare aspirate as per below.

Aspiration may be repeated up to 2 additional times. Any further passes after 3 attempts have low diagnostic yields.

Preparation Technique

1. Remove needle from syringe and pull air into syringe. Replace needle.
2. Place **one drop** of material in the centre of the labeled slide close to the frosted end.
3. With the long edge of the second slide held at 90 degrees smear material along slide length of the first slide.
4. Fix the smeared slides immediately with cytospray held no closer than 6 inches to the slides. If adequate material has been aspirated, you will see white particles on the slide.
5. Place the remaining material into the Cytolyt solution by gently pulling a small amount of solution up into the syringe and slowly expelling the sample back into the specimen

container. **It is important that the majority of the material be fixed in Cytolyt rather than on the smear.**

6. If the aspirate is bloody or scant, then repeat the procedure.
7. Allow the slides to dry completely before placing in a cardboard folder for transport.
8. Fill in the requisition with patient identifiers and clinical history. **Remember: clinical impression is essential to accurate diagnosis.**

Note: If there is a clinical suspicion of **lymphoma**, a portion of the first and second pass should be submitted for flow cytometry in appropriate fixative

Send the specimen in a biohazard bag to Cytopathology Laboratory, LHSC-University Hospital, using the porter system for delivery to the Pathology Specimen Receiving Area (PathSRA) at each campus.

For any further information, please call Cytopathology at LHSC-University Hospital, extension 36392 during regular working hours.