



CONWAY MEDICAL CENTER

PROCEDURE

When in hard copy form, refer to Policy Manager to validate this as the most current revision.

TITLE:	LAB-SPC-CYT-08.03 FNA Collections (Fine Needle Aspirations)-PRO		
ISSUED BY:	Cytotechnologist	REFERENCE #:	LAB-SPC-CYT-08.03-PRO
APPROVED BY:	Lab Director	EFFECTIVE DATE:	1992-10-15

SCOPE: All potential submitters and collectors of FNA samples for processing in CMC laboratory.

I) PROCEDURE:

Fine needle aspirations are performed throughout the hospital. It is extremely important proper collection and submission protocols be adhered as poor specimen recovery would require the patient to undergo another procedure that can be quite painful for him/her.

II) MATERIALS NEEDED:

A) FNA

- 1) Syringe holder (CAMECO Medical Ltd., London NW6 2 BP) mounted with a 20cc disposable syringe
- 2) OR, 60cc syringe with 20 inch extension set
- 3) 22 and 25 gauge hypodermic, Franseen needles (Sometimes a thicker needle may be required)
- 4) microscope slides
- 5) 95% Ethanol
- 6) 30 ml vial of CytoLyt solution

B) CORE BIOPSY

- 1) TEMNO gun
- 2) 14-20 gauge coaxial needles
- 3) Telfa pads (3in x 4in)
- 4) 10 ml syringe of 0.9% sodium chloride injection
- 5) 20 ml vial of 10% neutral buffered formalin

TIME OUT performed:

- 1) The patient is asked to identify himself by name and birth date.
- 2) The patient is asked what type of procedure that is being performed (Fine Needle Aspiration).
- 3) The patient is asked to identify the site of the procedure (lump on left neck, etc).
- 4) The patient is asked if there are any allergies to medicines.

III) PROCEDURE:

A) FNA

- 1) PALPABLE LESIONS
 - (a) The lesion is localized by careful palpation.
 - (b) The skin over the site is wiped with antiseptic.



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- (c) The needle is inserted into the mass and the plunger of the syringe is retracted maximally.
 - (d) The needle should be moved back and forth in the mass several times, always maintaining the negative pressure in the syringe.
 - (e) When the aspiration has been completed, the pressure in the syringe is allowed to equalize by releasing the plunger, the needle is withdrawn.
 - (f) The contents of the needle and syringe are transferred to a glass slide by first disconnecting the needle, filling the syringe with air, and after having reconnected the syringe and needle, express some of the material obtained onto the slide. Or, if using needle only with no tubing, fill a syringe with air, connect to needle and express material onto slide.
 - (g) A clean glass slide is placed on top of the material and the slides are pulled apart, spreading the specimen in an even coat over the surfaces of each slide. One slide is immediately fixed in 95% Ethanol and one slide is air dried for Diff Quick staining procedure. Any excess specimen may be expressed into a CytoLyt vial for ThinPrep processing.
 - (h) Several pairs of smears can be made and extra material may be needed depending on the amount of material collected and type of testing requested.
 - (i) All specimen containers and slides should be labeled per hospital policy and sent to cytology.
- 2) NON-PALPABLE LESIONS
- (a) In non-palpable lesions of deep seated visceral organs, special methods are used for obtaining cell samples. The target is a lesion visualized by CAT-Scan or ultrasonography.
 - (b) The lesion is localized by the Radiologist with the aid of CAT-Scan or ultrasonography.
 - (c) A hypodermic or Franseen needle of appropriate gauge is positioned in the lesion.
 - (d) A 60cc syringe with a 20in extension tube can be connected to the needle hub.
 - (e) The plunger of the syringe is retracted maximally and the needle moved back and forth in the mass several times, always maintaining negative pressure in the syringe.
 - (f) When the aspiration has been completed, the pressure in the syringe is allowed to equalize by releasing the plunger and the needle is withdrawn.
 - (g) The contents of the needle and syringe are transferred to a glass slide by first disconnecting the extension tubing from the syringe and filling the syringe with air, and after having reconnected the syringe to the tubing, expressing some of the material obtained onto the slide. Or, if using needle only with no tubing, fill a syringe with air, connect to needle and express material onto slide.
 - (h) A clean glass slide is placed on top of the material and the slides are pulled apart, spreading the specimen in an even coat over the surfaces of each slide. One slide is immediately fixed in 95% Ethanol and one slide is air dried for Diff Quick staining procedure. Any excess specimen may be expressed into a CytoLyt vial for ThinPrep processing.
 - (i) Several pairs of smears can be made and extra material may be needed depending on the amount of material collected and type of testing requested.
 - (j) After the smears have been made, any remaining material in the needle, syringe or tubing can be flushed into a 30mL vial of CytoLyt solution. Occasionally the syringe and tubing are flushed by discarding the needle and then aspirating the CytoLyt solution directly from the vial by moving the plunger of the syringe back and forth.
 - (k) All specimen containers and slides should be labeled per hospital policy and sent to cytology.



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B) CORE BIOPSY

- 1) Core biopsies of a lesion are often performed in conjunction with a FNA. Procedure is as follows:
 - (a) The lesion is localized by the Radiologist and the needle is positioned under CT or ultrasound guidance.
 - (b) The TEMNO gun is attached to the needle and the biopsy is performed.
 - (c) The biopsy is transferred from the needle to a Telfa pad.
 - (d) A touch prep is performed by the cytotech or pathologist. Saline can be added to the biopsies immediately after the touch prep is performed.
 - (e) The Telfa pad is folded over to protect the core from air drying.
 - (f) Most of the time, the cores are placed directly into the 20 ml vial of formalin after touch prep performed.
 - (g) All specimen containers and slides should be labeled per hospital policy and sent to cytology.

*For FNA's performed by the Pathologist.

When the pathologist performs the FNA in the office setting additional precautions must be taken to ensure patient identity and patient, site and specimen integrity. A time out is performed and written acknowledgment is kept with patient chart.

C) EBUS, Navigational bronchoscopy, EUS:

- 1) The patient is prepped and sedated for the procedure.
- 2) The scope is introduced into the airway (EBUS/Nav bronch) or stomach (EUS) and guided to site of interest.
- 3) The area is sampled by aspirating material into the needle.
- 4) The needle is removed from the scope and the specimen is expressed on a glass microscope slide that has been labeled per hospital policy.
- 5) Place another slide on top of the specimen and pull the slides apart, spreading the specimen in a thin film over the surface of the two slides.
- 6) One slide is air dried for Wright's stain (Diff Quik) and the other is fixed in 95% ethanol for Pap stain. Any excess specimen may be expressed into a CytoLyt vial for ThinPrep processing. Correct identification of each site is mandatory, submitting separate specimen containers, labeled "A", "B" etc., for each site.
- 7) Additional specimens may be submitted for cell block, ThinPrep, or flow cytometry.
- 8) All specimen containers and slides should be labeled per hospital policy and sent to cytology.

D) EUS, PANCREATIC CYSTS

- 1) The patient is prepped and sedated for the procedure.
- 2) The scope is introduced into the stomach (EUS) and guided to the cyst.
- 3) The area is sampled by aspirating material into the needle.
- 4) The needle is removed from the scope and the specimen is expressed on a glass microscope slide that has been labeled per hospital policy.



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- 5) Place another slide on top of the specimen and pull the slides apart, spreading the specimen in a thin film over the surface of the two slides.
- 6) One slide is air dried for Wright's stain (Diff Quik) and the other is fixed in 95% ethanol for Pap stain. Any excess specimen may be expressed into a CytoLyt vial for ThinPrep processing.
- 7) With pancreatic cysts, several extra tests may be desired. Amylase and CEA are sent-out for testing. At least 1 ml of fluid is needed for CEA and 0.5 ml for amylase. All cyst fluid is to be expressed into a blue top conical tube and will be aliquoted appropriately in cytology lab after centrifuged. Mucin testing is done in house.
- 8) Orders for amylase and CEA are to be entered in the computer by endoscopy staff.
- 9) All specimen containers and slides should be labeled per hospital policy and sent to cytology.

RECORDS: NA

REFERENCE STANDARDS: CAP GEN.40000; GEN.40100; GEN.40016; GEN.40032; GEN.40050; GEN.40100

REVISION/REVIEW HISTORY:

Date	Affected Section(s)	Summary of Changes ('Reviewed' or details of change)
6-23-11 tas	None	Reviewed/revised-Saved electronically in the lab G drive.
10-24-11tlp	Format	Change in format for MCN. Title shortened.
3-28-13 tlp	None	Reviewed. No content changes.
5-20-14 tlp	All	Reviewed. Combined procedures 8.11 and 8.09.01. Deleted unnecessary content. Added EUS and navigational bronchoscopy to the procedure. Pancreatic cysts added. Name change from 8.11 to 8.03.
2-25-16tlp	ALL	Reviewed. No content changes
2-24-17tlp	ALL	Reviewed. No content changes. Sentence structure changes only.