

# Cytopathology Rotation - Objectives

## Patient Care

### A. Procedural Skills

1. **Level I (General Objectives):**
  - a. Demonstrate the ability to perform fine needle aspirations on palpable lesions in different anatomic sites under supervision of the attending pathologist.
  - b. Demonstrate the ability to approach patients for obtaining adequate history, physical exam and informed consent.
  - c. Demonstrate the ability to prepare the patient and the biopsy instrument.
  - d. Demonstrate the ability to acquire appropriate and adequate material for diagnostic purposes.
  - e. Demonstrate the ability to prepare smears for immediate alcohol fixation and perform Diff-Quik stains on air-dried smear.
  - f. Collect appropriate material for cell block and appropriate fixation of core needle biopsies.
  - g. Demonstrate the ability to perform microscopic examinations on-site to determine specimen adequacy.
  - h. Demonstrate the microscopic ability to recognize lesional tissue for appropriate triage of material for ancillary studies such as microbiology, flow cytometry, immuno-histo chemistry, cytogenetics, etc.
  - i. Demonstrate the ability to provide the required and appropriate after-care of the patient following the FNA procedure.
2. **Image guided FNAs (Specific Objectives):**
  - a. Ability to respond in a timely manner to radiologically and endoscopically guided FNA requests
  - b. Demonstrate the ability to perform microscopic set-up and immediate Diff-Quik staining on radiologically and endoscopically procured FNA material
  - c. Ability to effectively recognize specimen adequacy
  - d. Ability to effectively communicate with radiologists and physicians performing guided FNAs
  - e. Ability to collect the data required to complete the cytology requisitions including appropriate clinical history, radiology findings and care provider for appropriate communication of final results.
3. **Non-Gynecologic Cytology (Specific Objectives):**
  - a. Demonstrate the ability to differentiate various non-gynecologic samples and cyto preparation techniques, i.e. smear, cyto-spins, filter techniques such as ThinPrep, cell block preparations, etc.
  - b. Ability to recognize the differences between air-dried and alcohol fixed smears.
  - c. Ability to recognize the different cytologic fixatives for different specimen types.
4. **Gynecologic Cytology (Specific Objectives):**
  - a. Become familiar with liquid-based gynecologic samples
  - b. Understand the mechanics of GYN ThinPrep screening
  - c. Become familiar with the current Bethesda terminology for reporting of gynecologic cytology.
  - d. Understand the mechanics of reflex testing GYN samples with ASCUS diagnosis for HPV.
  - e. Understand computer-assisted ThinPrep Pap screening.
5. **Plan**

- a. Procedural skills are taught by attending pathologist, fellow and senior residents for Level I
- b. Level II residents are instructed by the fellow and attending pathologist.
- c. For residents in an AP/CP program, a mandatory 2-month cytology rotation is required. Any other time spent in cytology is on elective basis.

6. **Level II (General Objectives):**

- a. Demonstrates familiarity and confidence in FNA technique, including instrument and materials needed.
- b. Familiarity and confidence in handling non-gynecologic cytologic materials.
- c. Mastering of triage algorithms
- d. Mastering of current Bethesda terminology and appropriate confidence in Gyn Pap smear interpretation.
- e. Familiarity with common conditions on all types of cytology material.
- f. Demonstrate familiarity with appropriate use of ancillary techniques such as IHC, Flow cytometry, and in-situ hybridization.
- g. Demonstrate the ability to diagnose common neoplastic and non-neoplastic lesions on FNA specimens.

7. **Supervision/Assessment**

- a. Procedural skills are assessed by the attending pathologist and fellow for Level I residents.
- b. Residents are required to screen all slides assigned to them on a given cytology rotation. Correlation with patient's history and clinical findings as well as review of all results in the Laboratory Information System (LIS) is required.
- c. An exit quiz is administered to the residents at the end of the two-month rotation.

**B. Interpretive Skills**

1. **Level I (Objectives):**

- a. Ability to identify normal versus abnormal cellular components on cytologic specimens.
- b. Demonstrate understanding of the current Bethesda nomenclature for reporting of cervico-vaginal cytology.
- c. Demonstrate the ability to apply the appropriate criteria for determination of abnormalities on cervico-vaginal cytology.
- d. Appropriate formulation and terminology for reporting of non-gynecologic samples.
- e. Demonstrate the ability to formulate interpretive reports on fine needle aspirations including basic elements of history, physical examination, fine needle aspiration procedures, microscopic diagnosis and finding of any ancillary tests.
- f. Demonstrate the ability to appropriately SNOMED code these cases.
- g. Communicate results to clinicians with appropriate recommendation and clinical follow-up.

2. **Level II (Objectives):**

- a. Demonstrate proficiency in diagnosing cervico-vaginal cytology with high degree of accuracy.
- b. Demonstrate ability to formulate complex and comprehensive cytopathology reports on fine needle aspiration specimens.

3. **Plan**

- a. Interpretive skills are taught by attending pathologists, fellows and senior residents for Level I and by attending pathologists and fellows for Level II

4. **Supervision/Assessment**

- a. Interpretive skills will be assessed by the attending pathologists through editing and correcting the residents' cytopathology reports which have been reviewed by the attending pathologist or fellow for finalization.

- b. Residents must examine cytology slides and form a preliminary opinion before microscopic sign-out with the attending pathologist.