

The Department of Pathology is pleased to make available a fine needle aspiration (FNA) service to UHB clinicians on a consultation basis. Our trained Cytopathologist is available upon request to perform this procedure, at the bedside for inpatients or in the clinic setting. For clinicians performing their own FNAs, the Cytopathologist is available to assess specimens for adequacy on site. As studies have shown, this on-site assessment improves the diagnostic yield for needle aspirations, reduces the need for repeat biopsies, and avoids delay in treatment. In most cases the FNA will be performed immediately on request, and no special appointment is necessary.

Clinicians desiring an FNA should page the Cytopathologist at 917-219-4058 or call Surgical Pathology at Extension 1669.

Although any palpable lesion lends itself to aspiration biopsy, the most often requested sites for FNA are breast, thyroid, salivary glands, head and neck lesions and lymph nodes. We are also prepared to perform on-site assessments for adequacy for deep-seated FNAs performed under CT or ultrasound guidance.

There are several advantages to FNA when compared with open biopsy or core biopsy. Some include the following:

Advantages for the Patient:

- Minimal pain and post-aspiration discomfort
- Anesthesia is rarely necessary
- Can be used in high-risk patients
- Usually an outpatient procedure
- Saves time and hospitalization
- Rapid alleviation of anxiety
- More time to adjust to other procedures

Advantages for clinical management:

- Easily repeated
- Allows sampling of multiple areas with minimal trauma
- Minimal disturbance of tissue planes for sole purpose of diagnosis

- Can confirm malignancy of a nodule, but leaves it intact to monitor therapy by clinical examination or repeat aspiration
- Therapeutic for some masses such as cysts and abscesses
- Quick feedback helps in triaging and planning other investigative procedures
- Rapid turnaround time

Advantages for the Laboratory:

- Excellent cell preservation due to rapid fixation
- Allows studies requiring freshly harvested cells (e.g. flow cytometry)
- Material can be obtained for microbiology
- Academic stimulus for laboratory personnel

Fine needle aspiration biopsy is a minimally invasive technique that allows a prompt (on-site) and accurate cytologic diagnosis of palpable lesions. Who, then, can perform this procedure? The procedure can be performed either by clinician or trained cytopathologist.

There are advantages and disadvantages to both the clinician and the cytopathologist performing the FNA. While a clinician who has a continuous physician-patient relationship has a thorough knowledge of the patient's history and will ultimately be part of the decision-making team, he/she does not read and interpret cytology slides, and therefore often submits specimens that are inadequate for diagnosis. Inadequate specimens are a waste of time and money, as these specimens are processed using purchased stains and reagents and require the time of the laboratory technician.

A cytopathologist, on the other hand, is proficient at the FNA technique and is able to read smears at the time of biopsy, therefore providing real-time results reporting. Because an assessment is made at the time of biopsy, the cytopathologist is more likely to obtain adequate specimens, as well as determine if additional specimens must be submitted for ancillary studies (e.g. microbiology or flow cytometry).

In an article by Nasuti, et al.¹, reports of 5,688 on-site FNA cases at University of Pennsylvania Medical Center were reviewed. It was found that the rate of non-

diagnostic FNA is higher (20%) without on-site evaluation, compared with on-site evaluation (0.98%) Higher rate of specimen adequacy decreases cost to both institution and patient (i.e. no repeat FNA). On-site immediate evaluation by cytopathologist of adequacy of FNA specimens can be beneficial in terms of triage for ancillary studies, preliminary diagnosis and rapid clinical decisions

Please page the Cytopathologist at 917-219-4058 to obtain a consultation for FNA.