Fine Needle Aspiration

**Specimen Collection:** Use of fine needle aspirations (FNA) may provide diagnostic material easily and economically, but good quality material is critical. A few basic principles apply:
- Aspirate using a 25-gauge needle.
- Obtain one or two drops of material.
- Place a single drop on a slide, place a second slide face down on the first slide, and allow the drop to spread.
- Pull the slides apart, and fix immediately in 95% Ethyl Alcohol or spray fixative.

**Cell Block:** If possible, perform a second aspiration using a 21- or 22-gauge needle. Put this aspirate into formalin, either by aspirating a small amount of formalin into the syringe and submitting the syringe, or by rinsing the needle and syringe into a small container with formalin.

Cell block sections can often be obtained from this material, sometimes permitting a more specific diagnosis.

The larger needle may cause a bloodier specimen, but this is less of a problem with the cell block than with smears.

**Additional Aspirations:** If additional aspirations can be carried out, more material to examine is always helpful, either for more smears or cell block material.

**Fixation:** Rapid fixation is very important to prevent artifact caused by air-drying. Immediate immersion in 95% ethyl alcohol is best, but fixation with spray fixatives satisfactory.

If a lymphoid neoplasm is suspected, an air-dried slide, in addition to alcohol-fixed material, is very helpful.

Excess blood can obscure the diagnostic cells.

**Transport:** Transport the specimen to the laboratory for testing ASAP.