STANDARDIZED PROCEDURE ULTRASOUND GUIDED BIOPSIES:

THYROID FINE NEEDLE ASPIRATION, SUPERFICIAL LYMPH NODE, FAT PAD (Adult)

These procedures are intended to describe procedures performed by Nurse Practitioners (NP) (depending on the clinical privileges granted to the individual practitioner) at UC San Diego Health.

I. Definition: The purpose of this procedure is to allow the NP to safely obtain tissue for histological review to assess the etiology and/or severity of

a. thyroid disease

b. lymphadenopathy

c. immunoglobulin light chain (AL) amyloidosis

II. Background Information

A. Setting: The setting (inpatient vs outpatient) and population (adults) for the NP is determined by the approval of the privileges requested on the AHP Privilege Request Form.

B. Supervision: The necessity of the procedure will be determined by the NP in verbal collaboration with the attending physician or his/her designee. Direct supervision will not be necessary once competency is determined, as provided for in this procedure. At that time, general or indirect supervision is acceptable.

Designee is defined as another attending physician who works directly with the supervising physician and is authorized to supervise the NP.

The NP will notify the physician immediately upon being involved in any emergency or resuscitative events or under the following circumstances:

1. Patient decompensation or intolerance to the procedure

2. Bleeding that is not resolved

3. Outcome of the procedure other than expected

C. Indications

1. Thyroid nodules meeting biopsy criteria (TIRADS 4, 5)

2. Superficial lymph nodes (defined as <3 cm deep) that are suspicious for metastatic disease

3. Abdominal fat pad aspirate required for diagnosis of immunoglobulin light chain (AL) amyloidosis

D. Precautions/Contraindications

Relative Contraindications:

1. 1. Coagulopathy: abnormal PT/INR, PTT or platelet count less than 20,000

III. Materials

1. Non-angio tray

2. Lidocaine 1%

3. Mask, hat, sterile gown, sterile gloves

4. Skin cleansing agent

5. Biopsy needle

25G hypodermic for thyroid, lymph node

21G lymph node

16G Fat pad

18G Core lymph node

IV. Ultrasound guided biopsies

A. Pre-procedure evaluation/ Prior to Performing ultrasound guided biopsy:

1. Review indications for ultrasound guided biopsy with MD.

2. Laboratory testing: not recommended

B. Patient Preparation

1. Ultrasound of target area on day of biopsy to mark biopsy location.

C. Procedure Specifics:

1. Place patient in supine position.

2. Confirm ultrasound mark.

3. Draw lidocaine (1% without epinephrine) 5-10 ml under sterile technique.

4. Prepare the biopsy area using Betadine or other skin cleansing agent in the usual sterile fashion.

5. Provide local anesthesia by infiltrating skin using Lidocaine.

6. To prepare the small bore needle, 2-3 ml of air are drawn up into the syringe. The needle is confirmed to firmly attached to the syringe.

7. Using ultrasound guidance, the small-bore needle is advanced through the skin and slowly advanced into target area/lesion. Once through, the needle is pulled back and forth to obtain tissue sample.

8. The maximum number of passes with the small-bore needle is 4-5. If insufficient tissue, contact MD. Minimum amount of tissue required is 2 cm (about 0.79 in). If less, contact MD.

9. Supervising MD will always be available on site for supervision/questions.

D. Post-procedure

1. Monitoring per protocol (standardized).

2. Specimen sent to pathology. Order special studies as determined by discussion with MD.

3. Check CBC 4 hours post-procedure. If > 2g/dL point decrease in Hemoglobin, notify MD.

E. Follow-up treatment

Instruct patients and family to observe sight for signs and symptoms of infection and to call MD on-call or clinic for any unusual problems.

F. Termination of treatment

1. Patient does not agree to sign informed consent.

2. Patient does not consent to procedure by AHP.

3. Patient cannot tolerate the procedure emotionally and/or physically.

4. Procedure contraindicated secondary to abnormal laboratories.

5. Vital signs abnormalities and/or other concerns the AHP has will be discussed thoroughly with supervising physician.

V. Documentation

A. Documentation is in the electronic medical record

1. Documentation of the pretreatment evaluation and any abnormal physical findings.

2. Record the time out, indication for the procedure, procedure, type and size of needle used, EBL, amount of tissue removed, the outcome, how the patient tolerated the procedure, medications (drug, dose, route, & time) given, complications, and the plan in the note, as well as any teaching and discharge instructions.

B. All abnormal/adverse effects are reviewed with an attending physician

VI. Competency Assessment

A. Initial Competence

1. The NP will be instructed on the efficacy and the indications of this therapy and demonstrate understanding of such.

2. The NP will demonstrate knowledge of the following:

a. medical indication and contraindications of ultrasound guided: thyroid nodule biopsy, lymph node biopsy, fat pad biopsy

b. Risks and benefits of the procedure

c. Related anatomy and physiology

d. Consent process (if applicable)

e. Steps in performing the procedure

f. Documentation of the procedure

g. Ability to interpret results and implications in management.

3. NP will observe the supervising physician perform each procedure three times and perform the procedure **five** times under supervision.

4. Supervising physician will document the NP competency prior to performing procedure without supervision.

5. The NP will ensure the completion of competency sign off documents and provide a copy for filing in their personnel file and a copy to the medical staff office for their credentialing file.

Didactic Component:

Ultrasound course of at least 8 contact hours that includes:

1. Physics and instrumentation relevant to the exam being performed

2. Required elements and components as described by AIUM for the type of exam to be performed

3. The required anatomic landmarks as described by AIUM pertinent to the type of exam to be performed

4. Indications for types of exams being performed

5. Clinical implications of normal and abnormal findings

6. Ultrasound safety

7. Components of a complete ultrasound report

8. Client education

B. Continued proficiency

1. The NP will demonstrate competence by successful completion of the initial competency.

2. Each candidate will be initially proctored and signed off by an attending physician. Advanced Health Practitioner must perform this procedure at least ten times per year. In cases where this minimum is not met, the attending must again sign off the procedure for the Advanced Health Practitioner. The Advanced Health Practitioner will be signed off after demonstrating 100% accuracy in completing the procedure.

3. Demonstration of continued proficiency shall be monitored through the annual evaluation.

4. A clinical practice outcomes log is to be submitted with each renewal of credentials. It will include the number of procedures performed per year and any adverse outcomes. If an adverse outcome occurs, a copy of the procedure note will be submitted.

VII. RESPONSIBILITY

Senior Director of Advanced Practice Providers.

Revision Dates: 9/26/2023