WWW.IJRPR.COM

International Journal of Research Publication and Reviews

Journal homepage: www.ijrpr.com ISSN 2582-7421

Fine Needle Aspiration Biopsy

Ashitha suresh, Safak Abdul Kader S H, Nida Beegum M A, Parvathy C

Department of Pharmacy Practice, Malik Deenar College of Pharmacy, Seethangoli, Kerala, India

ABSTRACT

There are several types of thyroid problems that can impact hormone production or the structure of the gland. Some examples are hypothyroidism (an underactive gland), hyperthyroidism (an overactive gland), thyroid nodules, goiter, and thyroid cancer. This paper talks about how the fine needle aspiration biopsy diagnostic process was created and put into use. This procedure is often done with the help of ultrasound.

INTRODUCTION

Fine-needle aspiration biopsy (FNAB) of the thyroid is a straightforward, safe, and accurate way to diagnose problems with the thyroid. It is often done with the help of ultrasound. FNAB is the best way to do an initial examination with this minimally invasive method. Ultrasound guiding makes the sample better and the diagnosis more accurate. FNAB is very important for checking nodules, which are frequent in illnesses like nodular thyroid disease. It also helps find tumors early and keeps people from having surgery for benign nodules that aren't cancerous.

FINE NEEDLE ASPIRATION BIOPSY

Fine-needle aspiration biopsy (FNAB) of the thyroid gland is a common and accurate test performed to find out if someone has nodular thyroid disease. A fine needle aspiration biopsy of a thyroid nodule is a quick and easy operation that can be done in the doctor's office.

•The biopsy is usually done with the use of ultrasound to make sure the needle is put in the right area in the thyroid nodule.

PROCEDURE

1. Lie on your back with your head tilted back so that your neck is straight. A pillow may be put beneath your shoulders to help you get in the ideal position for the biopsy at times.
2. You might feel some pressure on your neck from the ultrasound probe and the needle during the treatment.
3. During the biopsy, you should try to stay as still as possible and not cough, talk, or swallow.
4. Most of the time, 3 to 6 aspirations are made.
5. If judgments were taken to get those, further passes might be needed for molecular testing.
6. It is safe to do while patients are on anticoagulants or antiplatelets.
7. It is important to use a smaller gauge needle (27-gauge needle), make as few passes as possible, and watch the patient for a few minutes for symptoms of bleeding.

POST BIOPSY PROCEDURE

After the biopsy is done, a 4×4-inch gauze pad is used to provide firm pressure on the spot.

Once the bleeding stops, an adhesive bandage is put on the puncture site(s), and the patient is watched for a few minutes. If everything is fine, the patient can go home.

COMPLICATIONS

- Thyroid FNA biopsy, particularly using US-FNA, is very safe.
- No serious complications such as tumor seeding, nerve damage, tissue trauma, or vascular injury have been reported.
    - Needle puncture may cause slight discomfort and possible skin ecchymosis at the aspiration sites However, occurance of a minor hematoma is uncommon.
    - Patient use of anticoagulants or salicylates does not preclude FNA biopsy.
    - Needle track implantation of thyroid carcinoma is extremely rare and appears to be an exceptional complication .

REFERENCES

1. Wu M, Burstein DE. Fine needle aspiration. Cancer investigation. 2004 Jan 1;22(4):620-8.
2. Gharib H, Goellner JR. Fine-needle aspiration biopsy of the thyroid: an appraisal. Annals of internal medicine. 1993 Feb 15;118(4):282-9.
3. Nguyen GK, Lee MW, Ginsberg J, Wragg T, Bilodeau D. Fine-needle aspiration of the thyroid: an overview. Cytojournal. 2005 Jun 29;2:12.
4. Baloch ZW, Sack MJ, YU GH, Livolsi VA, Gupta PK. Fine-needle aspiration of thyroid: an institutional experience. Thyroid. 1998 Jul;8(7):565-9.
5. Belfiore A, La Rosa GL. Fine-needle aspiration biopsy of the thyroid. Endocrinology and Metabolism Clinics. 2001 Jun 1;30(2):361-400.