AACE/ACE Advanced Neck Ultrasound Training Course™

Saturday April 16, 2016

7:30 – 8:00 am  Advanced Anatomy of the Neck

1. Learn the anatomy of the neck; identify the important landmarks (trachea, muscles, thyroid, and blood vessels.
2. Understand the defined surgical compartments of the neck.
3. Review the anatomy of the submandibular and mediastinal spaces and implications for ultrasound study.
4. Describe the appearance and size limits of the normal thyroid.

8:00 – 8:30 am  Key Physics and Doppler Principles

1. Review essential neck ultrasound physics concepts and artifacts
2. Demonstrate Doppler principles used in neck ultrasound

8:30 – 9:30 am  Thyroid Nodules

1. Recognize ultrasound characteristics of benign and malignant nodules.
2. Understand the predictive value of ultrasound characteristics and how they relate to probability of malignancy.
3. Review pattern recognition in thyroid nodule evaluation
4. Recognize the impact of these characteristics in the evaluation of multinodular goiter.

9:30 – 10:00am  Diffuse Thyroid Disease & Thyroiditis

1. Describe the sonographic appearance of autoimmune thyroid disease.
2. Avoid interpretative errors when analyzing heterogeneous thyroid
3. Review the potential utility of Doppler in the evaluation of thyrotoxicosis
4. 

10:00 – 10:15am  Break

10:15 – 11:00am  Lymph Nodes: Preoperative Assessment and Postoperative Surveillance in Thyroid Cancer

1. Learn to identify characteristics of benign and malignant lymph nodes.
2. Understand the role of cervical ultrasound in the pre-operative management of thyroid cancer.
3. Understand the role of ultrasound in the long-term surveillance for recurrence in thyroid cancer.

11:00 – 11:45am  Lymph Node Mapping with Case Examples
1. Understand the role of formal lymph node mapping prior to surgery
2. Provide templates for lymph node mapping.
3. Review the surgical compartments of the neck

11:45am – 12:45pm  
Nodule and Lymph Node Images  
1. Display images of nodules and lymph nodes to highlight clinical decision making  
2. Utilize ARS to promote interactivity

12:45 – 1:30pm  Lunch

1:30 – 5:30pm  
Lab 1 – Performance of Ultrasound Exam  
Objectives:  
1. Perform complete ultrasound examinations on model patients.  
2. Correctly identify and characterize pathology on model patients  
3. Describe the content of an ultrasound report on model patients.

Sunday April 17, 2016

7:30 – 8:15am  
Parathyroid Ultrasound  
1. Recognize the ultrasound appearances and features of parathyroid adenomas.  
2. Understand the anatomical variations in the location of parathyroid glands.  
3. Define the role and review the technique of US guided FNA biopsies with PTH estimation in syringe aspirates in the localization of parathyroid adenomas.

8:15 – 9:15am  
Ultrasound Guided FNA Biopsy  
1. Understand the ATA and AACE guidelines for biopsy  
2. Recognize the various approaches to biopsy (parallel and perpendicular, linear and convex transducers, suction and suctionless) and how to modify the technique to match the clinical situation.  
3. Learn to prepare quality microscopic slides.

9:15 – 9:30am  Break

9:30 – 10:15 am  
Percutaneous Ethanol Injection  
1) A review of agents available for percutaneous ablation.  
2) Review the indications for PEI.
3) Effectiveness and limitations of PEI.
4) An overview of the procedure of PEI.

10:00 – 11:00am Ultrasound Report Preparation: Certifying Agency Standards

1. Understand the components a complete ultrasound exam according to AACE/AIUM protocol.
2. Learn to describe tissue characteristics sonographically.
3. Prepare comprehensive ultrasound reports according to AIUM/AACE protocol and ECNU requirements

11:00am – 12:00pm Case based panel discussion:
Objectives:
1. To demonstrate real life patient images and decision making
2. Review of images to decide on whether biopsy is needed or not
3. 5 cases from the audience for panel to discuss management

12:00- 12:45pm Lunch

12:45 – 3:15 pm Lab 2: Ultrasound Guided Biopsy and Slide Preparation
All Faculty
1. Demonstrate how to prepare probe for biopsy using probe cover and describe elements of aseptic technique.
2. Demonstrate methods of biopsy technique including parallel and perpendicular approach.
3. Perform FNAB on phantom including aspiration of material.
4. Demonstrate slide preparation using aspirated material.