

AACES Lung Ultrasound Course

An Introduction to Point of Care Lung Ultrasound

19 Feb 2020

Offered by

The Alexandra Academy for Clinical and Emergency Sonography

In Conjunction with

The Society for Emergency Medicine in Singapore (SEMS) Annual Scientific Meeting 2020



Course Description

Specifically designed for healthcare providers who are exploring point of care ultrasound to enhance management of the patient with acute lung pathologies. Covering lung ultrasound in detail, supported by basic point of care echocardiographic evaluation, the course presents a systematic and comprehensive assessment with ultrasound,. This focused and targeted evaluation aims to enable a rapid and effective decision making, and improve triage, diagnostic, therapeutic and monitoring capabilities.

Lectures are condensed and delivered in an interactive format. The **Hands-on Training** is the cornerstone of the program. During these sessions, trainees will be guided to perform bedside scans on volunteers with normal and pathological findings and practise intervention skills on mannequins. With time set aside for bedside scanning and keeping the trainer to trainee ratio at maximum of **1:4**, participants will have ample opportunities to practise during the Hands-on Training sessions. This course will lay the foundation required of the healthcare provider in using point of care lung ultrasound in the management of their patients, including those who are critically ill.

Learning objectives

Upon completion of this course, participants will learn how to use ultrasound to:

- ☐ Perform standard lung examination
- ☐ Interpret ultrasound lung signs and artifacts
- ☐ Make ultrasound diagnosis of critical lung conditions: pneumothorax, pneumonia, atelectasis, pleural effusion and interstitial syndrome.
- ☐ Perform standard diaphragm examination; evaluate diaphragm thickening and excursion.
- ☐ Integrate sonographic lung diagnosis in the management of the critical ill

Who should attend

Respiratory physicians, critical care physicians, emergency physicians, physicians, surgeons, anaesthetist, nurse practitioners, residents, medical officers and healthcare workers involved in the management of ill patients.

ACGME-I Competencies

This course is designed to meet the following ACGME competencies:

- ☐ Patient Care
- ☐ Medical Knowledge
- ☐ Practice-Based Learning and Improvement

AACES Lung Ultrasound Khoo Teck Puat Hospital, Singapore • 19 Feb 2020 PROGRAM

Time	Program
12:30	Registration & Welcome
12:45	Lung ultrasound scanning techniques 15min Overview of point of care lung ultrasound. Standard lung windows and scanning procedures.
1:00	The basic ten 15min Overview of the 10 basic lung artefacts
1:15	Pneumothorax 15min Signs of pneumothorax. Lung sliding and pitfalls. Ultrasound guided procedure for pneumothorax.
1:30	B-lines and interstitial syndrome 20min Utility of B lines in diagnostic decisions: heart failure, ARDs, interstitial pneumonia vs COPD/asthma. Correlation with clinical and laboratory findings.
1:50	Hands on training 1
2:30	Break
2:45	Pleural effusion 15min Signs of normal lung base. Detection of small lung effusion: exudate vs transudate. Underlying lung pathology. Ultrasound guidance for thoracocentesis.
3:00	Consolidation and other lung pathologies 20min Signs and features of consolidation. Evolution of C-profile: early vs established consolidation. Pulmonary infarction. Atelectasis. Pleural mass.
3:20	Diaphragm Ultrasound 15min Sonoanatomy and physiology. Diaphragm paralysis, assessment of weaning failure.
3:35	Summing it up 20min Interactive case discussion
3:55	Hands on training 2
5:15	Admin
5:20	Course closure

Venue

Khoo Teck Puat Hospital, 90 Yishun Central, Singapore 768828

Others

Course material and light refreshment will be provided. The introductory lecture on physics, knobs, probes and scanning techniques will be made available to course participants 2 weeks before the course date. Please view it prior to course commencement. For more details, go to www.AACES.sg