



AACES Critical Care & Emergency Procedure Course

Course Description

Specifically designed for healthcare providers who are exploring point of care ultrasound to enhance the safety and effectiveness of their procedural skills. This course covers the spectrum of ultrasound guided procedures and interventions commonly performed in the intensive care units, high dependency units and emergency department. The morning session focuses on critical care procedures; and the afternoon is dedicated to soft tissue and musculoskeletal procedures.

Lectures are succinct 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 ultrasound guided interventional skills on phantoms and mannequins. With more than 4hrs set aside for the practical and keeping the trainer to trainee ratio at maximum of **1:4**, participants will have ample opportunities to practise. This course will lay the foundation required of the healthcare provider in performing ultrasound guided critical care and emergency procedures.

Learning Objective

Upon completion of the Acute and Critical Care Session, participants will learn how to use ultrasound to:

- Perform cricothyrotomy, endotracheal intubation, predict difficulty of laryngoscopy
- Perform pericardiocentesis, guide insertion of transvenous pacemaker
- Perform central venous catheterization of the internal jugular, subclavian and femoral vein
- Perform peripheral venous and arterial catheterization
- Perform thoracocentesis, paracentesis and suprapubic bladder aspiration
- Perform lumbar puncture
- Evaluate prandial status, confirm placement of nasogastric tube

Upon completion of the Soft Tissue and Nerve Block Session, participants will learn how to use ultrasound to:

- Perform lower limb nerve block (fascia iliaca-femoral nerve)
- Perform truncal nerve block (erector spinae plane block / intercostal block)
- Perform joint aspiration of the knee, hip, elbow and shoulder
- Detect and remove foreign bodies
- Assist in confirmation of joint enlocation (shoulder) and assessing adequacy of fracture reduction

Who should attend

Critical care physicians, emergency physicians, physicians, surgeons, anaesthetist, residents, medical officers and healthcare workers who are required to perform these procedures in their practice. Participants should already have a basic understanding and appreciation of point of care ultrasound and ultrasound physics.

ACGME-I Competencies

This course is designed to meet one or more of the following ACGME competencies:

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

Course Programme

0800	Registration & Welcome	1300	Lower Limb Nerve Block Approach to nerve block. Fascia iliaca-femoral nerve blocks
0810	Introduction Role of procedural ultrasound and pre-procedural preparation. Principles of needle guidance	1315	Truncal Nerve Block Erector spinae plane block Intercostal nerve block
0830	Central Vascular Access Central venous access: internal jugular, subclavian, femoral vein.	1335	Spinal Tap Lumbar puncture.
0850	Tube Endotracheal intubation ; cricothyroidotomy, nasogastric intubation, prandial status.	1350	Manipulation and Reduction US assisted shoulder joint and distal radius manipulation and reduction.
0910	Truncal Tap Paracentesis; thoracocentesis; suprapubic bladder aspiration.	1410	Joint Tap Arthrocentesis of knee, hip, elbow and shoulder.
0930	Pericardial Tap Pericardiocentesis, transvenous pacemaker insertion.	1425	Hands-on Training 2 (1st Rotation)
1000	Break	1500	Break
1020	Hands-on Training 1	1520	Hands-on Training 2 (Continue..)
1220	Lunch	1645	Admin & Course Closure

AACES Online Lectures

Vascular Access: peripheral

- Approach to vascular access. Peripheral venous and arterial access

Soft tissue

- Soft tissue abscess; peritonsillar abscess; foreign body identification and removal.

*Online lectures will be made available 2 weeks prior to course date. Please review these AACES Online Lectures before the course. **Hands on training will include peripheral vascular access and removal of foreign body.***

Admin

Course material, meals and parking coupons will be provided.

Venue: Khoo Teck Puat Hospital, 90 Yishun Central, S768828.

Website: Visit www.AACES.sg to learn more about AACES and other educational resources.