



Title CSOP Ultrasound

Version No: 1.3

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Appendix 1: Specific clinical questions from the Standard Modalities

- **Chest assessment**

- Ultrasound has a higher sensitivity than auscultation and chest X-ray for identifying pneumothorax assessment in both medical and trauma patients. This can be used to guide pre-hospital management:
 - To differentiate between pneumothorax or pulmonary contusion in order to inform clinician about the potential need to perform a thoracostomy or not.
 - Unilateral vs. bilateral thoracostomy insertion in the ventilated hypoxic patient to reduce iatrogenic morbidity
- Ultrasound can also identify large pleural effusions (either serous (medical) or blood (trauma)), facilitating patient assessment, pre-alert and handover

- **Echo in Life Support**

- Diagnosis of pericardial effusion & tamponade (medical or trauma)
- Diagnosis or exclusion of pneumothorax
- Differentiation of electromechanical dissociation and pseudo-PEA, in facilitating decision making regarding futility and prognostication

The decision to undertake a resuscitative thoracotomy within the scope of our current SOP is a clinical decision, however, Ultrasound may add diagnostic value in the context of an undifferentiated shock state i.e. helping to guide interventional decision-making following clinical deterioration of a patient.

- **US guided IV access**

- **Assessment of Abdominal Aortic Aneurysm**

- In the context of a collapsed patient with symptoms attributable to the above condition, Ultrasound may aid in identifying the above and help guide the decision for where to transport the patient i.e. vascular capable medical facility. Also, with TAAS now carrying blood products, the exclusion of the above by means of ultrasound scanning could help avoid incorrect administration of blood in a patient presumed to have collapsed from a suspected AAA rupture.

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