Training Protocol
Ultrasound-guided Localisation of the Cricothyroid Membrane Study

Prior certification/qualification.
Study operators will be consultant emergency physicians or advanced trainees in emergency medicine, who have completed basic credentialing in emergency ultrasound, with at least eFAST and AAA competency (minimum of 25 satisfactory scans and a supervised 'exit examination' in both modalities).

Training.
Study operators will undergo didactic training using a video and a one-hour practical training session involving the accurate identification of the cricothyroid membrane in at least 5 healthy volunteers. Study operators will receive a reference card for revision of practice. Accurate localisation of the cricothyroid membrane during training will be determined by consensus between the two supervisors of training (CP & IF).

Prior eLearning:  Localising the Cricothyroid Membrane (CM) with Ultrasound via AirwayManagement.dk

Technique for Ultrasound-guided Localisation of Cricothyroid Membrane (CTM).

Patient:

- Positioned to maintain spinal precautions.
- Cervical collar removed by nursing assistant during localisation of CTM.
- Collar replaced once CTM marked.

Probe:

- High-frequency linear transducer.

Procedure:

- The linear transducer is held in the non-dominant hand of the clinician in the longitudinal orientation with the probe marker toward the patient's head just lateral to the midline of the trachea to identify the cricothyroid membrane.
- The cricothyroid membrane is centred on the screen of the US machine (see Fig 1).
- CTM centring is confirmed by sliding a blunt, 19G drawing up needle underneath the US probe until it casts a shadow in the centre of the CTM (see Fig 2).
- The US probe is then rotated 90° so that the probe marker is pointed to the patients’ right.
- The CTM is again identified and the peak of the membrane placed in the centre of the US screen.
- An invisible line is drawn in the centre of the probe, this time in the sagittal plane, indicating the midline of the patient's neck and the CTM.
- The study marker is then placed at the intersecting points of these lines, indicating the geographical centre of the CTM.
Additional material:  
**Episode 19 – Full Cric**  
via UltrasoundPodcast.com

References.