



Emergency Ultrasound UK

Introduction

Welcome to the “Introduction to Emergency Ultrasound” course. We hope that this course will provide you with the initial knowledge and basic skills required to begin training in emergency ultrasound.

Traditionally, ultrasound machines have not been dedicated to the Emergency Departments in the UK. This led to frequent requests for ultrasonography to be performed by radiology staff. Although the service provided by radiology departments within normal working hours (9-5 Monday to Friday) is often prompt and efficient, problems do occur outside these times when the on call radiologist has to be called into the hospital, which can lead to delays in patient care.

Ultrasound imaging has been shown to enhance the clinician’s ability to assess and manage patients with a variety of acute illnesses and injuries (see below.) As ultrasound examinations can be performed at the bedside, this diagnostic tool is of great use in managing unstable patients who may not be candidates for other imaging procedures.

Ultrasound has been used extensively by Radiologists, Cardiologists, Obstetricians, Gynaecologists, Trauma Surgeons, Vascular Surgeons, Neurologists and more recently by Emergency Physicians. Focused bedside ultrasound examination by trained emergency physicians performed to answer specific clinical questions, have been shown to improve patient outcomes. Examples of Specific indications for focused examination include bedside determination of cardiac activity in the arrest situation, pericardial effusion, free fluid in the abdomen or thorax, presence of abdominal aortic aneurysm, the establishment or exclusion of ectopic pregnancy, diagnosis of cholelithiasis, and ultrasound assisted vascular access.

The use of bedside ultrasound in the Emergency Department by Emergency Physicians is now common place in several hospitals in the United Kingdom, as well as most major hospitals in Australia and Northern America. Policies on the use of bedside ultrasound by emergency physicians have been published by The College of Emergency Medicine, The Royal College of Radiologists, The Australian College for Emergency Medicine, The American College for Emergency Physicians, and The Society of Academic Emergency Medicine.

This course aims to provide an introduction to the use of bedside ultrasound. In this course we cover the four areas described as Level 1 indications in the UK guidelines: Detection of Abdominal Aortic Aneurysm, Vascular Access, FAST Scanning and Focused Cardiac scanning in the setting of PEA arrest. The course does not attempt certify any level of expertise or provide a licence to practice. Further hands-on experience and credentialing is essential.

This booklet provides copies of slides used in the course, as well as log forms, guidelines and references.

We hope you enjoy the course.

Paul Atkinson, Richard Kendall and David Lewis