

HAND-HELD ULTRASOUND (HHU) AS A DIAGNOSTIC AND THERAPEUTIC TOOL IN BEDSIDE CLINICAL MEDICINE

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Ultrasound is a sound wave that can be generated with a transducer via piezoelectric crystals and received to produce 2D images on a screen. The evolution of ultrasound device from traditional cart based to hand held devices has massively increased its use in the bedside clinical setting which is called point of care ultrasound (PoCUS). Its application is extensive ranging from lung ultrasound which can rapidly determine an effusion, edema or consolidation to determining the hemodynamic and cardiac parameters in critically ill patients. This can be done by checking the Inferior vena cava (IVC) diameter and left ventricular ejection fraction. Besides this, with high frequency probes, vascular integrity and difficult vascular access can be easily established. Rapid assessment of trauma patients and surgical abdomen can also be established with ease. In short, now is the time for physicians to take hand held USG devices as routine tool for clinical examination as it will increase diagnostic accuracy and improve care in medicine.

Keywords: Ultrasound, evolution, PoCUS, assessment, routine, accuracy.

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