

How useful is multi-organ point-of-care ultrasound?



A review article in the *Journal of Intensive Care* outlines the role and usefulness of symptom-based and sign-oriented multi-organ point-of-care ultrasound (MOPOCUS) for patients with undifferentiated respiratory difficulty, chest pain or shock. The authors, Young-Rock Ha, Bundang Jesaeng Hospital, South Korea and Hong-Chuen Toh, Khoo Teck Puat Hospital, Singapore, also explain how US can be performed effectively, efficiently and in a timely way. The article focuses on the differential diagnostic process in pre-cardiac arrest situation and the sequence of scanning.

The authors note that although there are few studies on MOPOCUS using chest pain alone as the primary indication, "the astute clinician is cognisant that aetiologies classically associated with chest pain, such as acute coronary syndrome and aortic dissection, can be associated with dyspnea or hypotension or even presents atypically with these two "non-cardiac" presentations alone in the absence of chest pain." They recommend that clinicians to perform a symptom- or sign-based MOPOCUS for any combination of chest pain, dyspnea and chest pain.

The suggested scanning sequence explained in the article is

- 1. Lung and inferior vena cava (IVC) (including the abdominal aorta)
- 2. Heart (including the thoracic aorta in case of chest pain)
- 3. Abdomen for evaluation of the source of intra-abdominal sepsis or blood loss

See Also: Thoracic Ultrasound Vital in the ICU

"MOPOCUS can provide many critical pieces of information to guide clinical decision-making, while waiting for laboratory and imaging results", write the authors, and the articles includes algorithms to guide the clinician. MOPOCUS is a powerful adjunct to clinical assessment, they conclude.

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