

**Challenger Fundamentals: EM ultrasound. Fundamentals for emergency and acute care physicians**

John L. Kendall, Mark Deutchman, Sarah A. Stahmer. 2008. Produced by Challenger Corporation. CD-ROM for Windows- or Macintosh-based systems. US\$395.00

It is well recognized that the use of bedside ultrasonography in the emergency department has become commonplace and is threatening to finally become standard of care. If the use of ultrasonography for emergency patients is so operator-dependent, why learn it from a text? In-person courses that involve practising with actual machines on actual people and models are expensive, generally require travel and vary in the amount of hands-on experience. Enter *Challenger Fundamentals: EM ultrasound*,<sup>1</sup> a CD-ROM program that touts “comprehensive instruction in the performance and interpretation of ultrasound in emergency medicine and trauma.”

The CD-ROM is easily installed, very simple to navigate, and in 10 chapters covers the most necessary and relevant aspects of emergency

ultrasonography. The “Physics and orientation” chapter gives the best description of the basic physics behind ultrasonography I have seen, and is far better than any text with its animated imagery. In fact, regrettably, they did such a nice job with this complex topic that they overlooked some of the basics, like terminology (e.g., hyperechoic, hypoechoic and anechoic).

The chapter about trauma and the focused assessment with sonography for trauma exam is thorough and also explores lesser used views. There is also a respectable discussion on the literature behind its use with trauma patients. The chapter on the right upper quadrant is very thorough and explores many findings and diagnoses that I rarely consider, but should. The chapter devoted to sonographic guidance of procedures is very helpful and covers everything from line placement to bladder ultrasonography to soft-tissue foreign bodies and abscesses. The other chapters are equally strong, and in total, a novice ultrasonographer should plan to devote significant time to each section. There was no section on the discussion of setting up a new ultrasonography program

in an emergency department, which is commonly seen in texts but not in courses.

The media format has many strengths including the user’s ability to navigate and to read a transcript of the dialogue. Rarely, a slightly mispronounced medical word provides a laugh. The still image and moving video library is enormous and gives the user adequate exposure to multiple presentations.

Learning ultrasonography by this format is certainly better than learning from a text and is cheaper than travelling to a course. I would recommend it most for untrained physicians in departments that already have ultrasonography; it will give them the foundation to then go work with colleagues and “dive in.”

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**REFERENCE**

1. Kendall JL, Deutchman M, Stahmer SA. *Challenger fundamentals: EM ultrasound*. Memphis (TN): Challenger Corp; 2008.