Viewpoint Article

British Society of Echocardiography Accreditation – The 'Gold Standard' For Acute Medicine

S Clare

We read with interest to the article written by Kevin Fox[1] and wholly support the notion that acute medical trainees who wish to undertaken echocardiography within the medical admissions unit (MAU) should achieve British Society of Echocardiography (BSE) accreditation. I was one of the first trainees in acute medicine to undertake training in echocardiography; despite considerable competition from cardiology registrars as well as resistance from the physiology department I am now close to attaining the BSE Trans Thoracic Echocardiography accreditation

The ability to perform echocardiography provides enormous benefits for an acute physician and his / her patients. Rapid answers to important and life changing clinical questions will ultimately improve patient diagnosis, management and outcome.[2] In our Acute Medicine department we are privileged to have a dedicated echo machine. This has allowed us to practise 'front door' echocardiography, with numerous cases of endocarditis, pericardial effusion and impending tamponade being diagnosed. For example, a 33 year old female who had undergone previous splenectomy presented with fevers, meningeal symptoms and a diastolic murmur. A bedside echocardiogram, undertaken within an hour of her arrival on the unit revealed an aortic valve vegetation with severe aortic regurgitation. An early diagnosis of endocarditis enabled rapid institution of appropriate antibiotic therapy. Blood cultures subsequently grew *Bordetella Holmesii*, a rare organism which is a recognised cause of endocarditis in asplenic individuals.[3] In another case, a 54 year old gentleman presented with breathlessness and right upper quadrant pain; the initial clinical impression was of pulmonary embolism. However, bedside echo revealed a large pericardial effusion with signs of haemodynamic compromise and impending tamponade. He underwent immediate pericadiocentesis, which rapidly resolved his symptoms. In these, and many other similar cases in our department, prompt access to bedside echo equipment and expertise enabled swift diagnosis and the institution of appropriate therapy.

As Kevin Fox states, quality control, audit and clinical governance are paramount.[1] Individuals must appreciate their limitations and this is the responsibility of the course organisers as well as the trainee. The single most important determinant of skill and knowledge retention is the amount of 'overlearning' (additional training) undertaken beyond that required for proficiency.[4] The BSE accreditation process addresses this 'overlearning' by providing regular structured practice, incorporating the submission of a 250 case logbook.

There are three essential steps that need to be addressed before committing yourself to the BSE accreditation. The most important step is the appreciation of the commitment in time and work required. Secondly, you must have a supervisor who is also committed and willing to teach. The supervisor needs to be 12 months post BSE accreditation or a very experienced echocardiographer. The third step is to ensure you have a dedicated weekly echo session throughout your training.

The accreditation process involves a written examination and a logbook of cases scanned and reported.[5] The examination is in multiple choice format and involves a theory and reporting section. The logbook should contain 5 'powerpoint' cases and 250 cases that you have scanned and reported over a course of 24 months. These cases should vary from the more common LVH and aortic stenosis cases to the more rarer HOCM and congenital disease cases. This curriculum provides the trainee with a solid foundation of knowledge and a wide range of scanning skills; this is vital in acute medicine where we encounter a wide spectrum of diseases. Your supervisor will mark both your logbook and the 5 submitted cases, and then, it is marked by an external marker against a set standard. These 250 cases must be collected 12 months prior to the examination and 12 months after, and this has often resulted in many clinicians having to repeat the written examination.

The cost of accreditation is the sum of £150, but you must apply to be a member of the British Society of Echocardiography prior to this, at current a yearly cost of £60. For this sum you will also receive the journal ECHO which is quarterly and contains distance learning modules. The BSE website also provides valuable information regarding measurements and interesting cases. There are numerous courses available nationally; a mixture of lecture based and practical based with costs ranging from £500 to £1000. To get the most out of these courses I would only advise attendance once you are at the stage of scanning independently and achieving interpretable

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pictures in all views. Accreditation lasts 5 years and re-accreditation involves providing evidence of CPD and continual scanning practice (minimum 100 cases per year).

Ultimately dedication, persistence and sheer commitment is the key to acquiring the accreditation. In some cases, cardiology registrars would prefer to be in the catheter lab leaving their echocardiography sessions free - an opportunity I took advantage of. I even attended my weekly echo sessions during my maternity leave in order that I could achieve my numbers. This ultimately lead to the echo department appreciating my services but even more so when I began to use my skills at the front door; the benefits for the echo department were clearly evident.

Attaining BSE accreditation is an intense process, but provides a gold standard that is achievable within the timescale of an acute medicine training programme. It provides the trainee with a solid foundation of knowledge, skills and experience. It was only after 18 months of training and scanning 150 cases I felt competent to employ the focused/screening study at the front door. I appreciate that I have been fortunate to have had this opportunity, which will not be available for all acute medicine trainees in the future. However from my experiences I would strongly recommend this avenue to any individual who has the desire to pursue training in echocardiography.

References

1. Fox, K.A position Statement: Echocardiography in the Critically Ill. *Acute Medicine* 2008;7**(2)**:95–96
2. Senior R, Chambers J. Portable echocardiography: A review. *Echocardiography*. 13; **3**: 2006
3. Shepard C, Maryam D, Kaiser R *et al.* Bordetella Holmesii Bacteraemia: A newly recognised clinical entity among asplenic patients. *Clinical Infectious Disease*.2004; **38**: 799–804
4. Kneebone RL, Scott W, Darzi *et al.* Simulation and clinical practice: strengthening the relationship. *Med Ed.* 2004; **38**:1095–1102
5. www.bsecho.org

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