

Iain McCall
Adrian K. Dixon

Ultrasound: A response to the paper: a strategic issue for radiology?

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I. McCall (✉)
Department of Clinical Radiology,
Robert Jones & Agnes Hunt Hospital,
Gobowen, Oswestry,
Shropshire, SY10 7AG, UK
e-mail: iainwmcc@aol.com
Tel.: +44-1691-404193
Fax: +44-1691-404057

A. K. Dixon
Radiology Department,
Addenbrooke's Hospital,
Hills Road,
Cambridge, CB2 2QQ, UK
e-mail: adrian.dixon@european-
radiology.org

The accompanying paper about the current and future direction of ultrasound, prepared by two European ultrasound experts, provides provoking food for thought [1]. There is no doubt that ultrasound equipment is becoming cheaper and better, and that the technique is being disseminated into a much larger pool of operators, all with varying skills, dexterity and experience. Not all these operators will be radiologists. In most European countries, training in radiology is becoming devolved very much according to system-based experience (cardiothoracic, neuroradiology, gastrointestinal, etc.) rather than the technique-based training of old (plain radiography, fluoroscopy, US, CT, MR, NM, etc.). In

the past, young radiologists might have rotated to ultrasound for a prolonged block of 3–4 months, where they would have “lived, eaten and breathed” ultrasound to the exclusion of nearly everything else. In this way, they would have gained a full understanding of the various machines and technical aspects, while gaining skills, dexterity and practical know-how. They would also have observed numerous colleagues pushing the frontiers of ultrasound. In the current system, practical skills and understanding of equipment are gained in the first year of training and diagnostic skills are acquired during organ-based training where applicable. The individual-system-based radiologists will have training in all aspects of

ultrasound but will subsequently become extremely competent in examining areas within their own field of expertise—for example, a musculoskeletal radiologist will become highly skilled in assessing the rotator cuff. As a result, such radiologists will lose experience of other organ diseases and will probably be less conversant with the use of some of the latest developments in the field such as ultrasound contrast media. This may limit the future development of ultrasound into the sub-specialty areas.

This current status differs markedly from the situation of 10–15 years ago. In most hospital settings at that time, one or more radiologists practised ultrasound nearly to the exclusion of all other branches of radiology. Such radiologists would be responsible for all equipment purchased, the training of sonographers and radiologists, and oversee the entire gamut of ultrasound. They would be fully conversant with the latest techniques and contrast

media, power Doppler, etc. They would be able to apply these advances in ultrasound into all the sub-specialty areas. The young radiologists, training with such a committed expert, would leave their period of training in ultrasound pretty confident of being able to use their ultrasound skills in whatever part of the body they chose to specialise in. They would also be well aware of recent advances. The paper invites leaders in radiology to come up with urgent measures to address some of the balance. It is, therefore, incumbent on organ-based radiologists who use ultrasound extensively to work closely together on the management and development of the service, possibly with a designated leader, to ensure that these drawbacks are overcome.

The paper highlights the diversification of use of ultrasound to many clinical groups, with medical students increasingly being encouraged to learn ultrasound tech-

niques and general practitioners starting to set up their own ultrasound practices. This poses a challenge to radiologists to define their role, which is likely to focus on the more complex clinical situations where their highly developed skills and knowledge provide maximum added value. There is, therefore, an even greater need for radiologists whose clinical practice involves significant and broader-based ultrasound skills to help with training and oversee the work that is being performed out in the field. It is also important that radiologists are at the forefront of technical

and clinical ultrasound research. Otherwise, ultrasound will increasingly be seen as the poor relation of CT, MR and PET. In time, the profession may well be questioned more closely about radiation dose: it would be a pity if we have discarded responsibility for ultrasound, which reigns supreme with regard to radiation and safety.

Iain McCall President ESR
Adrian Dixon Editor-in-Chief, European Radiology

References

1. Derchi LE, Claudon M (2008) Ultrasound: a strategic issue for radiology? *Eur Radiol* 18: e-pub August 15.
doi:[10.1007/s00330-008-1125-4](https://doi.org/10.1007/s00330-008-1125-4)