

Leserbrief

Open letter to Manfred Ritter, president of the Working Group of Echocardiography, Swiss Society of Cardiology (Cardiovascular Medicine. 2010;13(7–8):249).

I have read your annual report with great interest. As you know I have been engaged in perioperative (transoesophageal) echocardiography since 1989 [1] and involved in the education of intensive care unit (ICU) physicians (European Society of Intensive Care Medicine, ESICM) since 2003. I therefore feel the need to reply to your report on echocardiography in the ICU.

I would recall that ultrasound is being increasingly used in the intensive care unit (ICU) worldwide. Drug and fluid effects, the influence of artificial ventilation, patient positioning, and indication for and location of pleural drainage, are all very important indications for rapid ultrasound assessment of

organ pathology and function [2]. This is the diagnostic power for us as intensivists, its result sometimes leading to a complete change in therapy within a few minutes [1]. All this is true 24 hours a day, 7 days a week, and frequently our goal-oriented use of ultrasound has to be repeated several times a day.

In conclusion, we need ultrasound in intensive care in addition to the tests performed by trained cardiologists, not instead of them. Hence I do not see that the diagnostic power of echocardiography is in danger of decay from its use in the ICU. Apparently this opinion is shared by many other Swiss doctors: at their November 2009 session all the delegates of the “Schweizerisches Institut für Ärztliche Weiter- und Fortbildung” (Swiss Institute of Further Medical Education) voted against the request to ban the use of echocardiography by intensive care doctors.

I strongly hope that in the second

decade of this century we shall find joint solutions for the use of ultrasound in the ICU.

Daniel Schmidlin

- 1 Schmidlin D, Bettex D, et al. Transoesophageal echocardiography in cardiac and vascular surgery: implications and observer variability. *Br J Anaesth*. 2001;86(4):497–505.
- 2 Mayo PH, Beaulieu Y, et al. American College of Chest Physicians/La Société de Réanimation de Langue Française statement on competence in critical care ultrasonography. *Chest*. 2009;135(4):1050–60.

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Answer to the open Letter of PD Dr. D. Schmidlin

Thank you for your interest in our Working Group's annual report for 2009.

As you pointed out, your interest and criticism focuses on the statement concerning the use of goal-oriented echo studies by intensive care physicians, and the possibly inherent decay the diagnostic power of echocardiography may undergo with such use.

As you will agree, it goes without saying that goal-oriented echo studies and comprehensive echocardiographic examinations are two totally different matters.

Goal-oriented echo studies imply by their nature some risk of diagnostic errors [1], and this possibility is even increased in the ICU environment where patients, due to mechanical ventilation and for other reasons, are often anything but easy to image; there is no

question that relatively inexperienced ultrasound operators would potentiate even more the risk of missing a relevant diagnosis. And this, you will agree, cannot be the ultimate goal when it comes to the point-of-care. Hence, the question is not whether echocardiography should be used in intensive care medicine or not, but what is the setting for appropriate use of echo in the ICU.

The American Society of Echocardiography has prescribed a specified level of training [2] to resolve the problem, and I would suggest that echocardiography in the ICU should be performed under close collaboration/supervision with a cardiologist, to ensure an optimum diagnostic and, hence, therapeutic assessment in these critically ill patients. In this context, Swiss doctors' view on whether or not echo be used by intensive care physicians is of purely political relevance.

Manfred Ritter, MD

- 1 Goodkin G, Spevack D, Tunick P, Kronzon I. How useful is hand-carried bedside echocardiography in critically ill patients? *J Am Coll Cardiol*. 2001;37:2019–22.
- 2 Seward J, Douglas P, Erbel R, Kerber R, Kronzon I, Rakowski, et al. Hand-carried ultrasound device: recommendations regarding new technology. A report from the Echocardiography Task Force on new technology of the nomenclature and standards committee of the American Society of Echocardiography. *J Am Soc Echocardiogr*. 2002;15:369–73.

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