Ultrasound for everyone – is it the right time?

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In the last years, a multitude of papers showed an impressive development of imaging methods used for patients' evaluation, due to the large spread and increasing performance of these diagnostic tools.

In this context, ultrasound is the imaging method with the highest growth speed. Why? Because it is not irradiating the patient, the machine is mobile, the examination is performed by clinicians (“clinical ultrasound” or “point of care” ultrasound) [1], the cost of the examination is cheaper than of other imaging methods and finally, because mobile, small ultrasound machines are performant, but in the same time, not very expensive.

Thus, an interesting question arises. Is ultrasound for everyone (everybody)? Many years ago, when ultrasound entered in the clinical field, this method was used only by radiologists. Later, cardiologists, gynecologists and obstetricians, urologists and other clinicians started to use this method themselves. Why? Because they know very well the symptoms of their patients and can use the information gained by ultrasound examination for the therapy. On the other hand, it is difficult for radiologists to be well informed and trained in all fields of ultrasound.

In the last 10 years, we assisted to the introduction of ultrasound in many clinical fields, especially in a part of Europe and Japan (where the clinicians perform this procedure). The use of ultrasound for gastroenterologists and hepatologists, for specialists in nephrology, internal medicine, pneumology, vascular medicine, endocrinology, traumatology, ICU or emergency medicine is dramatically increasing, a fact confirmed by the high attendance and the high number and quality of scientific papers presented during the European and World Congresses of Ultrasound.

Training in ultrasound is required for fellows in many specialties, but it also became available for students, so that the ultrasound based methods of diagnosis spread quite everywhere (especially in some countries such as Germany, Italy or Romania). We are happy to ascertain that, with the effort of SRUMB (Societatea Română de Ultrasonografie în Medicină și Biologie), in Romania, the training program for young people in the field of ultrasound goes well.

Two years ago, in an interesting paper from the New England Journal of Medicine, the people from USA “discovered” “point of care” ultrasound [2], “clinical ultrasound” for the Europeans. It means that ultrasound examinations are performed by clinicians specialized in different fields, immediately after anamnesis and clinical examination, focused on different organs or regions of interest, so that a diagnosis is quickly established and the patient has the opportunity to receive a treatment sooner. Since small, portable, good quality and not very expensive ultrasound machines are available, they can equip the examination rooms of quite every physician (including GPs), thus increasing the diagnostic performance.

Continuous ultrasound education of these physicians is mandatory for a good proficiency in the field of ultrasound. Many courses of CME are proposed for this reason. Interdisciplinary societies such as EFSUMB (European Federation of Societies for Ultrasound in Medicine and Biology) or SRUMB were created to gather people performing ultrasound examination in different fields. The model of DEGUM (German Society of Ultrasound) with approximately 8,000 members from different fields of medicine, is the perfect model of specialties working together.

Finally, to answer the question from the paper’s title: Ultrasound for everyone - is it the right time? My answer is
absolutely YES! The physicians can be trained in the field of ultrasound starting from their student period (in some areas), during their fellowship or even after finishing their fellowship, to help them in their daily practice, regardless of the profile of their activity. They must be trained for “clinical ultrasound” with a rapid benefit for their patients.

References