

# Volume 11 - Issue 3, 2011 - Country Focus: Medical Imaging in Romania

# **Hot Topics**

Interviewee

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#### Why is Ultrasound Growing at Such a Rapid Pace? Is This Equally the Case in Romania as in the Rest of the World, in Your Opinion?

Ultrasound is safe, non-invasive, quick, inexpensive and accurate. These reasons are good enough for the growth of any imaging technique. However, US has more to it. Direct contact and interaction with the patient makes the method attractive for the majority of clinicians. The realtime character is not to be neglected. After all, beside fluoroscopy, US is the only wide scale available real time imaging technique. On the other hand, US is useful and used in so many medical specialties that, in this field at least, turf battles ceased a long time ago. Constant technical innovation, the emergence of new technologies as well as the availability of contrast media contribute to the amenity of an already mature imaging method. Romanian doctors are just as interested in US as doctors all over the world, if not more. The perception of US both as an extension of clinical senses and as an advanced diagnostic tool is accurate in Romania as well. Much of what has been recently developed by ultrasound professional and scientific international bodies, including professional competence classification, is already implemented and active in Romania.

# How Active is the Romanian Government in Funding Research in Medical Imaging?

Until 2008, a comprehensive national government programme was active that financed a research grant framework, in a greater range of areas. Imaging was not a specific topic of interest but it found its way in many of the other major fields such as cancer, ageing, etc. Unfortunately, major cuts in research funding were effectuated in the last two years, even for ongoing grants.

#### Do You Agree that Other Medical Specialties Should Have Equal Access to Ultrasound Technology?

Other medical specialties should definitely have equal access to US. The reality is that many non-radiologists perform excellent US in their field of expertise, many times better than radiologists. I would rather emphasise that radiologists should not abandon US for the sake of CT or MR. This is the real danger. And if radiologists don't act and show professional interest in this method, there should be no cause for surprise, if later on doors start closing for them in different niche applications of US. Let us just think of what happened with echocardiography, obstetric and ophthalmic US. US is not and should not be the turf of radiologists but the risk that other medical specialties might become excessively possessive with these slices of US is real.

On the other hand, I strongly support the idea that access to ultrasound practice should be controlled. Not by the medical specialty but by the existence of thorough knowledge and reasonable expertise, acquired through formal education and proven by formal accreditation of professional competence in the field of US. In other words, it does not really matter who does it, as long as that person is knowledgeable and accredited.

### Why is Specialisation in Ultrasound Increasing So Much and is This a Good or a Bad Thing?

Because the application of and amount of knowledge acquired in every area of US is increasing exponentially. There can no longer be "universal" ultrasonologists, similar to what happened in radiology. Specialisation in US is also associated with the penetration of the method in clinical wards. Medical specialties will focus on their limited field of interest, taking US across new boundaries in that specific domain. In the end, specialisation in US is neither good, nor bad: it is simply unavoidable.

# What is Your Opinion on the Usefulness of Elastography - is This a Commonly Used Diagnostic Technique in Romania?

Elastography is the new, still promising child of US. Exciting as a research tool, elastography has its own areas of already proven usefulness. Much is still to be done and understood in this field and, most of all, standardised, since, on the market, there are at least six different approaches to US elasticity assessment and image formation and at least four different ways to express stiffness numerically. Personally, I have been using elastography since 2006 and I feel comfortable including this technique in the general armamentarium of US diagnosis the same way © For personal and private use only. Reproduction must be permitted by the copyright holder. Email to copyright@mindbyte.eu.

as with compound scanning, harmonics, Doppler, contrast and 3D. In other words, I press the "elasto" knob every time I feel stiffness information might be relevant for the diagnosis. Most university hospitals but also many private practices operate US scanners with elastography. I would say that, in Romania, elastography is commonly used in teaching and research centres as well as in top-level private institutions.

#### How is Formal Training in Ultrasonography Organised in Romania and What Role Does the Society for Ultrasound Play in This?

Formal courses in US have been running in Romania since the early Eighties, governed by the fathers of Romanian US, Professors Gheorghe Badea and Gheorghe Jovin. From the first exam held in 1991, three types of US competencies were tested: general, echocardiography and obstetric/ gynaecology. From that point on, formal training was offered in seven teaching centres spread across Romania. Only graduates of accredited teaching centres are accepted, as a prerequisite for registration at the national examination of competence in US. Formal training extends over a period of six months, and is composed of formal courses, hands-on sessions, clinical observation, case reports and supervised practice. We have a national curriculum, programme and course directors accredited by governmental decision.

The SRUMB produces and keeps the curriculum upto- date and advises the governmental bodies. It also has a major role in accrediting new teaching centres or course directors. The SRUMB site is the centre of information about competence and postgraduate courses. In conjunction with EFSUMB, it organises an annual Euroson School Course jointly with the national congress of SRUMB.

Please Tell Us About the CERIS Study You are Involved in to Promote Non-Invasive Imaging in Musculoskeletal Ultrasound in Young Adults and Children.

The CERIS project aims to develop complex non-invasive imaging assessment protocols for some musculoskeletal disease in children and young adults. The focus is US and MR. It is funded by a national research grant and runs mainly due to the enthusiasm and perseverance of young academics. It already expanded beyond its original purpose, as new applications of the protocols emerged. More information on the CERIS project is available on the website of the university. Non-invasiveness is, in the end, one of the major goals of imaging. We want to get as close to the complete diagnosis as possible, without harming the patient. We only stick needles or wield a scalpel to make a diagnosis when there is no other choice left. Even when we have the diagnosis there is still need for follow-up. On the other hand, even with "noninvasive" imaging, repeat xray exams are limited in number. If all the above criteria are true for adults, they apply even more to children and young patients.

Non-invasiveness brings greater comfort to the patient and is, therefore, better accepted. It bears no complications. Yet, it is not always the least expensive approach to solving a problem. The main concern about using non-invasive techniques is that they should be reasonably accurate. And this is the justification for all the research that is being done.

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