Diversity in clinical applications – an advantage of ultrasonography

Prof.dr. Radu Badea
„Iuliu Hațieganu” University of Medicine and Pharmacy, Cluj-Napoca, Romania

Ultrasonography has now an obvious advantage in the diversity of its applications. This fact emerges from the current number of *Medical Ultrasonography.*

First article which catch the attention discuss the diagnostic approach to maxillary sinusitis using Ultrasonography. One group of pediatric specialists from well known Hospitals in Romania – Clinical Emergency Pediatric Hospital and Radiology Department form Cluj Napoca and, on the other hand, Pediatric Hospital „PhD Alfred Rusescu” from Bucharest – demonstrates the possibility of efficient evaluation of sinuses via Ultrasonography, also detecting inflammatory processes at this level. The study is prospective, the study group is statistical significant, and the results showed a very good correlation between Ultrasonography and radiology. In children, the use of a non-irradiating method to put a positive diagnosis is crucial and becoming more and more important.

An interesting observation emerges from the work of a group of researchers from Athens, Greece, regarding the use of Doppler Ultrasonography in the detection of small pleural effusions. Color changes in pleural liquid, induced by the heart beats and the respiratory movements, increases the Ultrasonography specificity in detecting effusion at this level. This conclusion is no more than another argument – if there was need for more- for the use of devices with color flow mapping (CFM) module in ER units and pneumology departments.

Doppler Ultrasonography also supports the clinical diagnosis of deep vein thrombosis. The method increases the diagnosis accuracy, contributes to the early detection of the disease and to a better follow-up after beginning the therapy. These are the conclusions stated by a group of researchers from 2nd Department of Internal Medicine, Cluj-Napoca.

Peripheral vascular examination is completed by the 5th Department of Internal Medicine researcher’s great experience regarding aortic aneurysm. They discuss the standards and the principles used in diagnosis aortic aneurysm on the verge of 2010.

There is a great variety of themes discussed in the current issue of medical Ultrasonography, like: non-invasive evaluation of liver fibrosis using ARFI technique (a research group from Timisoara); Doppler procedure utility in scrotal pathology A research group from Radiology Department from Cluj-Napoca); and a new technique used in mammary Ultrasonography for early cancer detection, described by an enthusiast and well known expert from France – PhD Michel Teboul.

Contrast enhanced Ultrasonography examination in digestive system is discussed in two complementary papers, based on the experience of researchers group from Third Medical Department in Cluj-Napoca.

There is also present the „beginner corner”, discussing pancreatic Ultrasonography.

Echography is a „full of life” procedure, well integrated in clinical diagnosis, with a large number of useful applications in medical practice. The current issue of Medical Ultrasonography states again this assertion. If needed…