

Highlights from EuroEcho-Imaging 2014

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EuroEcho-Imaging organized by the European Association of Cardiovascular Imaging (EACVI), took place in Vienna in 3-6 December 2014 and attracted over 3300 delegates to Austria. EuroEcho-Imaging has been one of the largest scientific events in Europe for more than 10 years. In January 2014 the

ESC integrated the working groups for cardiac magnetic resonance imaging (CMR), nuclear and cardiac computerized tomography (NC/CCT) with the European Association of Echocardiography into one unified multimodality structure called EACVI.

A unified structure of all cardiac imaging modalities is very well accepted as it allows for a cost effective patient oriented approach, a more complete and comprehensive training and also facilitates the creation of expert based algorithms.

The most recent EuroEcho Imaging meeting had a rich, well designed and very much up-to-date scientific program; where the main themes were "3D echo" and "imaging for acute cardiac care". To promote patients oriented approach new case based sessions were introduced. As usual other session formats continued like symposia, imaging campus sessions, debate sessions, how to sessions, and teaching courses for the delegates according to their interest during the congress. Clinically oriented cases and live presentations about new echocardiographic techniques were focused on novelties in 3D echo imaging where the value of 3D echocardiography for guiding interventions and assessment of ventricular mechanics was underlined.

The versatile use of echocardiography complemented by other cardiovascular imaging modalities such as CCT, CMR and nuclear imaging makes these imaging modalities an integral part

of the invasive percutaneous procedures such as trans aortic valve implantation (TAVI), mitral clip procedures, atrial appendage closure and paravalvular leak closures, to select appropriate candidates, to guide device implantation, and to look for potential complications following the procedures. Applications of fusion imaging with 3D-TEE/fluoroscopy during the procedures and the importance of rotational angiography in 3D post-TAVI valve reconstructions were presented with a lot of new enthusiasm and interest.

We were also updated of the implementation of myocardial deformation imaging into clinical practice to get fully quantitative assessments. Their general principles, cardiac mechanics: rotation, torsion, twist, untwist, 3D-strain and evaluation of cardiac dyssynchrony were presented as well. Additionally 3D-strain echocardiography as a novel diagnostic method for coronary artery disease and heart failure were stated. Normal and abnormal values for using 3D-strain in the clinical practice were clarified. Recommendations to monitor cardiotoxicity after chemotherapy and radiotherapy were underlined in cardiac-oncology session. Endocarditis from history to new echo modalities era, the athlete's heart, role of imaging in pericardial diseases, role of imaging in the emergency department the interplay between left ventricular filling pressures and myocardial mechanics emerging applications of stress echocardiography, new imaging perspective in systemic diseases, in acute aortic syndromes, arrhythmic disorders, intraoperative, pulmonary hypertension and right ventricle, multivalvular diseases, acute heart failure, challenges in diagnosis of cardiomyopathies, congenital heart diseases were the other interesting topics in the congress and were addressed with emerging new applications.

There were many sessions dedicated to EACVI Club 35 where young echocardiographers took part actively and presented several topics. Imaging highlights from 2014 recommendations, several educational and challenging topics of imaging

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Accepted Date: 28.01.2015

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DOI:10.5152/akd.2015.0101



were discussed during these sessions. Full-day teaching courses were conducted in the same hall, from general to in-depth courses.

Fusion between 3D ultrasound and 320 CT, 4-D Flow imaging (CMR/Echo) in adult heart disease, and 3D printing technology from cardiac imaging were presented as novel methods for cardiovascular imaging. Elastography and ultrafast echocardiography, molecular imaging of the vulnerable plaque, cardiac diffusion magnetic resonance, cardiac hybrid imaging were presented as imaging techniques of the future.

In the most recent EuroEcho Imaging congress a large number of abstracts were submitted and 930 of 1324 were accepted. General principles, the imaging examination, anatomy and physiology of the heart and great vessels, assessment of diameters, volumes and mass, assessments of haemodynamics, assessment of systolic function, assessment of diastolic function, ischemic heart disease heart valve diseases, cardiomyopathies, systemic diseases and other conditions, pericardial disease, congenital heart disease, masses, tumors and sources of embolism, diseases of the aorta, stress echocardiography, transesophageal echocardiography, contrast echocardiography, real-time 3D TEE, cardiac magnetic resonance tissue Doppler and speckle tracking were the main topics for abstracts. Twenty

one of these accepted abstracts were from Turkey. Additionally 2 clinical cases were accepted and presented from Turkey. In the scientific program there were five academicians from Turkey either chairing or speaking in a session.

International networking sessions are an opportunity for us to take place with preselected topics and Turkish experts in their field and to reinforce partnership with EACVI. During the last EuroEcho Imaging, there was a joint session with the Turkish Working Group of Cardiac Imaging. The topic was "Imaging in intensive care unit". In this session; Dr. Ç. Erol was the chairperson. Dr. M.S. Küçükoğlu presented "Imaging guided treatment of cardiogenic shock" and Dr. L.E. Sade presented "Echocardiography for evaluation of allograft rejection" with full attendance of the audience. The number of abstracts and speakers from Turkey either chairing or presenting in a session still need to be increased. In order to improve the impact of Turkey in EACVI we have to work hard to produce high quality researches and be more active in working groups. Young cardiologists, our Club 35 members deserve more (cardiologist of tomorrow) support and encouragement for education, researches and mutual interaction with EACVI. We hope that awareness will increase that the quality of cardiology strongly depends on imaging and that more energy and resources should be devoted to this field.