EuroEcho-Imaging 2015 highlights: great expectations

By Professor Bernard Cosyns, EuroEcho-Imaging Scientific Chairman

At the start of EuroEcho-Imaging 2015, what better way to prepare than to sample the highlights of this varied event? This year, the world’s largest cardiovascular imaging congress focuses on cardiomyopathies and early diagnosis of cardiovascular diseases thus allowing clinicians and scientists to present and discuss up-to-date research and findings on the broader spectrum of echocardiography. Completely new this year is the concept in which the orientation to the various topics is not so much aimed at the disease or the patient, but at clinical presentation. By allowing the clinical presentation to take center stage, it enhances lively discussions as well as questions as to what the use of imaging would be in that particular case and whether it would be helpful in differential diagnosis.

Case based reports and ‘Mr Jekyll and Dr Hyde’ sessions

Another novelty is the case based reports. A highly unusual approach is also been taken in dealing with the so-called controversies during the congress, which is why they have been named the ‘Mr Jekyll and Dr Hyde sessions’. Usually, the pros and cons of a particular topic will be defended by two different doctors, but we choose to have only one doctor taking both sides alternately. Featured topics in this session are paradoxical low flow aortic stenosis and coronary cardiac CT.

Newsroom symposium and new guidelines

A highly anticipated part of the program this year is the Newsroom symposium in which editors in chiefs of four of the best major magazines in cardiovascular imaging (JACC Imaging, JASE, Circulation Imaging and EHJ-Cardiovascular Imaging) present their cream of the crop selection. Furthermore, the Imaging Highlights 2015 recommendations will cover various topics such as hypertrophic cardiomyopathies, athletes and chamber quantification. Naturally, the release of the new guidelines will receive a lot of attention and hopefully, this will draw attention to the importance of detecting treatable cardiomyopathies such as Fabry’s disease.

Congenital heart disease in the spotlight

Other highlights include five sessions dedicated to congenital heart disease, the role of imaging in prevention, an extensive teaching course today with ‘my best and worst cases’ in interventional cardiology and a joint session with the American Society of Echocardiography on the state of the heart in heart failure with preserved ejection fraction. Already looking further ahead, the Future Perspectives in Cardiac Imaging symposium on the closing day of the congress features not only 3D printing in valve disease but also robotics and echocardiography as well as state-of-the-art fusion imaging and molecular cardiovascular imaging.

Professor Bernard Cosyns is Associate Professor of Cardiology at the UZ Brussel, Chair of the Web committee of the EAE and Head of Internal Medicine of CHIREC. His research interests are heart valve disease, contrast echocardiography, stress-echocardiography, small animals, three-dimensional echocardiography, ultrasound medical delivery and molecular imaging. Professor Cosyns is one of the editors of the EACVI Echo Handbook, which is a concise, fact-based and packed with images and illustrations manual linked to EACVI recommendations and its Core Curriculum.

Don’t Miss

▶ Consult the Heart Imagers of Tomorrow-HIT Posters during the breaks! (Formerly Club 35 Poster session)
▶ 16.00 Inaugural Session, Room Seville

Download the 2015 EuroEcho-Imaging Mobile App

Today in this issue ...

Imaging in the ESC Guidelines 2015; what’s new?...

How important is it for a young fellow to participate in practical workshops?

What does hands-on sessions add to conventional learning?

Update on the ESC Guidelines 2015 by Professor Lancellotti

2015 has seen five new ESC guidelines, varying from infective endocarditis, pulmonary hypertension, acute coronary syndrome, pericardial diseases, and ventricular arrhythmias and sudden cardiac death. These ESC guidelines summarize all available information and provide an invaluable resource.

Follow us at #euroecho on Twitter
The development of the new European Society of Cardiology (ESC) guidelines 2015 involved many people, one of them Prof. Lancellotti. He is part of the ESC Committee Practice Guidelines (CPG), where new guidelines projects are discussed and selected. The ESC guidelines 2015 include not one but several new guidelines focusing on various topics such as infective endocarditis, pulmonary hypertension, acute coronary syndrome, pericardial diseases, and ventricular arrhythmias and sudden cardiac death. As the ESC guidelines aim to present all the relevant evidence on a particular clinical issue in order to help physicians to weight the benefits and risks of a particular diagnostic or therapeutic procedure, they fulfill in practice all the following objectives: easy to use for clinicians/physicians, improve patient outcome, standardize patient treatment approach, guide the overall follow-up strategy and many more.

As ever, the latest ESC guidelines summarise all available information and will provide an invaluable source for the practising healthcare professional. Among their derivative products are the free ESC Pocket Guidelines App, which provides more than 100 interactive tools to help apply the guidelines in daily practice, and Essential Messages and Summary Cards, which summarise the main points and make them available to students, teachers and non-cardiologists. This year’s guidelines will also enhance what to do and not do in the clinical setting of their specific pathology; this table can be found in the last section of each guidelines document.

Overview of the new ESC guidelines

A short summary of the five new ESC guidelines is given below - each by specific pathology - as well as its reference.

Pulmonary hypertension

This year’s ESC/ERS Guidelines on Pulmonary Hypertension chaired by Nazzareno Galie (ESC) and Marc Humbert (ERS) cover the main clinical characteristics and relevant issues in the diagnosis and management of Pulmonary Hypertension as well as the latest treatment strategies and advice in decision-making. The new guidelines on Pulmonary Hypertension include definitions and classifications, epidemiology and genetics of pulmonary hypertension, pulmonary hypertension diagnosis, pulmonary arterial hypertension (group 1), specific pulmonary (arterial) hypertension sub-sets, pulmonary hypertension due to left heart disease (group 2), pulmonary hypertension due to lung diseases and/or hypoxia (group 3), chronic thromboembolic pulmonary hypertension (group 4), pulmonary hypertension with unclear and/or multifactorial mechanisms (group 5), definition of a pulmonary hypertension expert referral centre and to do and not to do messages from the guidelines.


Ventricular arrhythmias and sudden cardiac death

The Ventricular Arrhythmias and Sudden Cardiac Death Task Force led by Silvia Priori and by Carina Blomström-Lundqvist will spark considerable interest with advice on populations at risk and the use of the different devices to prevent CV events. The new guidelines on Ventricular Arrhythmias and Sudden Cardiac Death include definitions, epidemiology and future perspectives for the prevention of sudden cardiac death, therapies for ventricular arrhythmias, management of ventricular arrhythmias and prevention of sudden cardiac death in coronary artery disease, therapies for patients with left ventricular dysfunction with or without heart failure, cardiomyopathies, inherited primary arrhythmia syndromes, paediatric arrhythmias and congenital heart disease, ventricular tachycardias and ventricular fibrillation in structurally normal hearts, inflammatory, rheumatic and valvular heart diseases, arrhythmic risk in selected populations, gaps in evidence and to do and not to do messages from the guidelines.


Acute coronary syndrome

The new Guidelines on Ventricular Arrhythmias and Sudden Cardiac Death Task Force will be followed in 2017 by a new version of the STEMI Guidelines, as well as an update on the universal definition of MI. The new guidelines on acute coronary syndrome include diagnosis, risk assessment and outcomes, treatment, performance measures, summary of management strategy, gaps in evidence and to do and not to do messages from the guidelines.


ESC guidelines in the future

Although guidelines slightly touched on gaps in evidence and unmet needs, they should be follow-up by several position papers addressing significantly various clinical scenarios. Also, how guidelines are implemented in real practice is still unknown and merits further investigations linked with local promotion of education. Finally, they should also take into account the disparities across European countries.

Pericardial diseases

The task force responsible for the 2015 Pericardial Diseases Guidelines, long due for a new version, was led by Yehuda Adler and Philippe Charron. Their team concentrated on diagnostic and treatment strategies for patients with this condition. The new guidelines on pericardial diseases include epidemiology, aetiology and classification of pericardial diseases, pericardial syndromes, multimodality cardiovascular imaging and diagnostic work-up, specific aetiologies of pericardial syndromes, age and gender issues in pericardial diseases, interventional techniques and surgery, perspective and unmet needs and to do and not to do messages from the pericardium guidelines.


Infective endocarditis

The new Guidelines on Infective Endocarditis, chaired by Gilbert Habib and Patrizio Lancellotti, have based some of their 2015 recommendations on prophylaxis. They also review recent publications on the use of new antibiotics. The new guidelines on infective endocarditis include justification/scope of the problem, prevention, the ‘Endocarditis Team’, diagnosis, prognostic assessment at admission, antimicrobial therapy: principles and methods, main complications of left-sided valve infective endocarditis and their management, other complications of infective endocarditis, surgical therapy: principles and methods, outcome after discharge: follow-up and long-term prognosis, management of specific situations and to do and not to do messages from the guidelines.


The new version of the ESC Pocket Guidelines App – with new features and hosting the 2015 ESC Pocket Guidelines – is available via Apple Store, Google Play and Amazon.
Professor Zamorano: life, achievements and view on CV imaging in general

Currently head of Cardiology at Ramón y Cajal Hospital in Madrid, Professor Zamorano has worked in many hospitals and has contributed extensively to national and international research and medical publications. His desire to become a doctor stems from early childhood and he has pursued his dream ever since, moving into cardiology after his qualification cum laude as doctor in medicine.

In the early days

He started his cardiological career at the Department of Cardiology at the University Complutense of Madrid. It was there that he came into contact with Professor Pedro Zarco, Professor Luis Sánchez Harguindeguy, and Professor Carlos Macaya, who made him enthusiast for cardiology by introducing him properly to a world of knowledge, fascination and interest evolving around the heart. Professor Zamorano had found his true destiny and later went to Germany (the Department of Cardiology, University Clinic Essen, Essen, Germany) to receive specialist training in transthoracic and transoesophageal echocardiography.

Echocardiography and the development of 3D

Upon his return to Spain, he started work in the echocardiography laboratory in the University Clinic San Carlos, Madrid and became director of the lab in 1999. His ideas for the Clinic were ambitious: to be one of the best within Europe.

Together with a dedicated team, he achieved this and more, as they soon had a reputation for being innovative as well as they were one of the first to use 3D echo.

He has been actively involved in developing creating guidelines for the use of 3D echo and published extensively about this topic. In the years to come, the focus shifted to cardiac imaging where good use was made of newer techniques and devices and where many training sessions were conducted.

The Virtual Heart

Another enjoyable project that Professor Zamorano undertook was working on the production of the ‘Virtual Heart’, an extensive collection of DVDs which depict both anatomy and physiology of the heart, as well as its pathology and treatments (see more information and a detailed view at http://www.elmundo.es/elmundo-salud/especiales/2008/01/anatomia_corazon/localizacion_anatomica/index.html).

It took 3 years to make and really was a futuristic achievement in itself at the time.

Teaching and lessons to be learned

Since 2007, Zamorano is Professor of cardiology and the role he likes best is that of clinician as well as being a teacher. It is the combination that attracts him: helping patients and spreading and developing knowledge in young doctors. He strongly feels that it is about bringing them forward, by helping them and paving the way for new directions and lines of interest to expand knowledge in general and bringing it to a higher level. This might also include undertaking projects that may not be successful in the end. Even so, one should therefore not forsake them as they one way or another, these experiences will be valuable and young doctors will definitely learn from these projects.

Looking back as well as forward

Professor Zamorano is still amazed by the development of invasive cardiology and more particular, the possibility of intervening in the working heart without actually opening the chest and sees this as one, if not the most promising development in cardiology in recent years.

Better outcomes for patients are the ultimate goal which is why he feels strongly about combining cardiovascular risk factors with imaging to better assess the real risks. Improvements can be achieved on stratifying risks in which cardiovascular imaging is essential.

Pride and joy; professionally and personally

Professionally, he is most proud of his time as President of the European Association of Echocardiography and the General Secretary of the European Society of Cardiology. In everyday life, it is his team at the University Hospital which fills him with pride. Despite being a busy man, Professor Zamorano likes to play golf in his spare time.

He likes to spend time with his family which he credits as being ‘incredible’. His wife also works as a physician, and he has three children who he regards as his best achievements. There are two sons, one of which works at KPMG and the other is just finishing his studies to be an industrial engineer and his daughter – keen to follow in her father’s footsteps – is now in her second year. She is studying medicine at the University of Madrid, Spain.

Learn more about the EuroEcho-Imaging 2016 congress destination. Visit the Leipzig booth C10. Learn more about: transportation, accessibility, venue information ...
How important is it for a young fellow to participate in practical workshops?

Dr. Hani M. Mahmoud, adult cardiologist, Prince Sultan Cardiac Center, Al-Ahsa, Saudi Arabia

“The major challenge that young fellows face early in their training is the lack of exposure to advanced manual skills. In part this is due to the competition with other senior fellows and their many clinical assignments. Therefore, it is not surprising that hands-on sessions are considered the most attractive sessions in any conference as they provide a great and rare opportunity for the physicians to clinically practice what they are reading about. Many of the physicians – mainly young doctors - have no exposure to important skills learning programs. It comes without saying that it is really useful and adds a wealth of experience to conventional learning as it is well known that clinical practice is the best way to memorize what has been studied.

Since the main aim of any conference is education and improving patient service, providing hands-on sessions to physicians can guarantee their improved competence as well as encouraging them to keep updating themselves. No doubt this will have a great impact on patient service. Because hands-on sessions are the most attended, they should be multiple and repeated as much as time and staff capacity allow. Also, choosing the experts in the field is very important as it will provide a unique opportunity for the attendees to listen and interact with those experts and share their thoughts, concerns and enquiries with them.

With regard to tips & tricks for other young presenters, I think it is very important in presentations to decrease the text in the presented slides to the accepted minimum and to provide more informative and attractive images. Also, having interactive questions will keep the audience more alert and focused.”

What does hands-on sessions add to conventional learning?

Dr. Silvia Gianstefani, Consultant Cardiologist Croydon Health Services NHS Trust, London, UK

“How important is it for a young fellow to participate in practical workshops and hands-on sessions and what does it add to conventional learning?

“I think it is extremely important. Workshops and hands-on sessions add a lot to conventional learning and are fundamental ways of crystallizing the theory learnt with formal teaching. Simulations and discussion of clinical cases make complex concepts practical and easy to understand.

Of course, lectures are necessary to transmit information and knowledge to a large audience; however multiple studies have shown that people are more attentive when participating in a workshop and that the degree of information retention is higher through hands-on work.

The audience in a workshop is actively engaged in tasks which require applying their basic knowledge and is kept interested by a constant interaction. The communication with the tutor is facilitated, as asking questions in a smaller and informal group is less embarrassing than intervening at the end of a plenary session in a conference.

Workshops led by experienced instructors and hands-on sessions play a very important role in busy training programs where “one-to-one teaching” with an expert in a specific procedure or topic may be lacking due to time constrains or service provision needs.

Moreover interacting with the tutor allows people to calibrate themselves which may result in a reduction of the dis-concordance between operators.”