

## Imaging as Extension of Physical Examination

### *La imagen como extensión del examen físico*

This is 4th issue of the Argentine Journal of Cardiology dedicated exclusively to cardiovascular imaging, and its importance is directly related to the increased use of imaging studies for the management of a constantly growing number of patients.

Imaging is defined as the visual representation of an element through techniques linked to photography, art, design, video or other tools, and that in our specialty are called X-rays, Doppler echocardiography, CT/NMR, SPECT, PET, etc

Thanks to enormous technological evolution, an ever increasing number of processes are available and although all modalities should be represented, studies associated with echocardiography stand out, as it is the imaging technique most widely used in daily practice in our country and throughout the world, and the number of published articles faithfully reflects this reality.

Following a thorough history taking and physical exam, an imaging study is the universal language of the cardiologist; it is the way of "entering into the heart itself" and today has become an extension of semiology. However, it is wise to point out that in order to be sustainable its use should be rational, really appropriate, using a simple algorithm, without superposition of studies and always with the purpose of adding novel information leading to a relevant change in treatment; in essence, it should be clinically useful.

Mathematics is the main instrument to form images, and there have been great men who contributed with their intelligence to visualize the figures. One of them was Christian Andreas Doppler, who led a turbulent life between Vienna and Prague, and lies since 1853 in a damp cemetery in Venice.

His name will be eternally mentioned in each ultrasound study, and in a special article, Dr. Jorge Trainini tells us, with a unifying science and art language, his emotion when, unexpectedly, he stumbles with his tomb.

The reader will also find in this extensive number Dr. Doval's usual RAC Director's Letter, warning us that "screening" in the search of asymptomatic cardiovascular disease does not reflect reduction of end-stage disease or death.

Dr. Miguel Angel García Fernández, surely the person who has most contributed to the development of echocardiography in Spain and all Latin America, moves us with his editorial "The Stethoscope has

Passed Away. Long Live Handheld Echocardiography!".

Dr. Diego Medvedofsky and Professor Roberto Lang, father of three-dimensional echocardiography in the current world, wrote an editorial contribution on the work of Dr. Martín Munin et al. reporting mitral valve apparatus dimensions and morphology with 3D echocardiography in patients with degenerative mitral valve regurgitation.

In another original work, Dr. Quirino Ciampi, in collaboration with Dr. Eugenio Picano, pioneers in stress echo with dipyridamole describe a novel experience in which they add to the visual analysis of contractility, the information of coronary reserve and left ventricular elastance, a noninvasive contractility index, to simultaneously obtain triple and independent information.

Dr. Mario J. García, world expert in the most advanced imaging techniques, editorializes two articles from the same Cardiac Diagnosis group at Investigaciones Médicas de Buenos Aires, one from Dr. Natalio Gastaldello et al. and another from the author of this letter et al. and explains why 2D-strain may not have recent ischemic memory in the absence of contractile abnormalities and why in most patients it is unable to predict stress echo outcome.

The eminent work of Dr. Ricardo Migliore et al. on the relevance of increased arterial elastance to explain symptoms in severe aortic stenosis has a brilliant editorial from Dr. Phillipe Pibarot, the most proficient specialist on the subject of the dynamic relationship between the heart and systemic circulation.

The significance of a new NMR tool, as "feature tracking", is shown in the study of Dr. Esteban Clos et al. in their analysis of strain in hypertrophic cardiomyopathy, and Dr. Carlos Rochitte et al. congratulate in their editorial the authors of this innovative study strategy.

In another original work, Dr. Alejandro Panaro et al. from Professor Arturo Evangelista's team provide the valuable practical concept of diastolic retrograde flow assessment in the descending thoracic aorta for the quantification of aortic regurgitation.

Strain assessment by echocardiography has also been shown to be useful in Chagas disease with incipient cardiomyopathy, as evidenced in the original work of Dr. Matilde B. del Campo Contreras et al.

In a brief communication, Dr. Jessica Gantesti et al. report an interesting experience about the rela-

tionship between left ventricular mass and echocardiographic parameters in hypertensive patients.

Three scientific letters are published: “Unexpected angiographic finding: a remnant guidewire” is presented by Dr. Javier López Pais et al; Dr. Hernán Bertoni et al. write an instructive letter about the “Incidence and factors influencing medullary ischemia during endovascular treatment of the thoracic aorta” and Dr. Napoleón Soberanis Torruco et al. report a case in their presentation: “Primary Cardiac Leiomyosarcoma in a Pregnant Woman”.

Images in cardiology is another attractive section of the RAC, where Dr. Marta López Ramón and Ana Marcén Miravete share the case of a Valsalva sinus congenital aneurysm fistulized to the right ventricle associated with interventricular defect, and Dr. Macarena Zan et al. contribute with a case of “Exercise deconditioning in hypertrophic cardiomyopathy”.

Dr. Jorge Trainini, in his usual art section, draws with words the interpretation of Sofía Sabsay’s paint-

ings, who in her works “distills her humanistic vocation” expressed in her desire of having embraced medicine.

The consensus statement for the management of chest pain, directed by Dr. Ernesto Duronto and José Luis Navarro Estrada and coordinated by Dr. Juan Bengier and Iván Constantin, Dr. Jorge Thierer’s matchless critical analysis of outstanding publications in cardiology, the information for patients on Chagas disease by Dr. Jorge Mitelman and a video updating three-dimensional echocardiography information complete the present issue of the RAC.

We are all very proud of this large issue of the Argentine Journal of Cardiology completely dedicated to imaging, and with the certainty that it will be of interest, it will not be the last.

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