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IN THIS ISSUE OF EUROINTERVENTION

A mini focus on bifurcation lesions including the Asia Pacific consensus document and a look at the double-kissing culotte technique; left atrial appendage closure compared to medical therapy; assessing aortic regurgitation using video-densitometry, a new classification for the BASILICA technique, and more…

Davide Capodanno, *Editor-in-Chief*

As expected, the ESC Congress has established a new standard in the field of digital conferences, not least for its almost infinite programme whose navigation reminded me of the bewilderment you feel when looking for a TV series among the endless possibilities of a streaming catalogue. In addition, this year's slogan was "challenging times, infinite possibilities", underlining that every problem is also an opportunity to grow and move forward.

I found the cocktail successful: the recorded programme accessible in the morning and on demand, and the live programme in the afternoon ready to be captured by the non-European public. From a merely technical point of view, there is still a bit of disorientation and loss of consistency when the focus turns to individual speakers, who rightly transmit from anywhere and in any way (including myself) – and there's no question that the loss of live interaction is a really big deal. Still, recording is a great way to eliminate technical problems and avoid overruns; however, if you take away the

possibility of asking questions, or even just the possibility of getting excited and stumbling with words ... will it ever be the same?

That said, I also saw many interesting things that raised the bar a bit, starting with a virtual Amsterdam scenario in which the actors moved with style, and a digital studio that was credible and pleasing to the eye. Never before has the congress been experienced online as it was this year, with social media being the protagonist. If in other years the hashtag #ESCCongress played the subordinate role of a sounding board, this year it became the compass to orient oneself and experience the events and the people who populate it. Whoever goes to the congress platform finds themselves alone, like the nocturnal visitor to a museum full of beautiful works, while those who follow the congress from a social network find themselves commenting on what they see together with a myriad of their colleagues.

This is not a bad way to rediscover some of the spirit of live sharing that we lack so much today, but let's now move on to sharing knowledge on papers (or, in this case, digital papers, as this is the October electronic issue of EuroIntervention), something of which we never tire.

In this issue, our mini focus takes a closer look at bifurcation lesions beginning with a regional consensus document from one of the largest geographic areas in the world. From **Poay Huan, Adrian Low and colleagues**, the Asia Pacific (APAC) consensus on coronary bifurcation interventions looks at the challenges of providing the best care and management of coronary disease in a diverse and far-flung population differing on economic, educational and cultural levels. Specialists from 22 countries came together to explore coronary bifurcation interventions and the management of complex coronary disease in the APAC population – the differences as well as the similarities – dealing with such aspects as high regional levels of diabetes or a lack of public health awareness. As **Adrian Banning** underlines in his accompanying editorial, a consensus document is not a guideline and the subject of interventions in coronary bifurcations remains "challenging and, to a certain extent, controversial" with "no two bifurcations" being the same.

Our second article in the mini focus examines whether the culotte technique could be improved by the additional use of a double-kissing (DK) approach. **Gabor G. Toth, Emanuele Barbato and colleagues** use data from bench testing to provide deeper insight into the DK approach as well as understanding the limits of the culotte technique as practised today. While this still needs to be confirmed *in vivo*, they found that the use of a DK-culotte technique could result in a shorter procedure than a DK-crush approach, suggesting "that the DK approach facilitates the culotte technique". This article is accompanied by an editorial by **Jens Flensted Lassen and Tinen L. Iles** on the present and future use of our ever-increasing capacity for computational simulation in evaluating medical devices and procedures.

Won Kyeong Jeon, Hyo-Soo Kim and colleagues study anatomical attributes such as the dominance of the left circumflex artery, number of branches, vessel size and the relative dominance among diagonal branches as possible models for predicting their myocardial territory. Using myocardial perfusion imaging (MPI) and coronary CT angiography (CCTA),

they believe that the clinical application of these results will help in determining "the clinically relevant diagonal branches in the cardiac catheterisation laboratory".

For our last article in this mini focus, **Tinen L. Iles, Paul A. Iaizzo and colleagues** demonstrate the use of Visible Heart® technology, which allows for the "reanimation" of a human heart. This technology can be a useful addition to the clinically applicable resources currently available such as OCT and IVUS, to help visualise techniques in provisional bifurcation stenting procedures. Besides clinicians, the Visual Heart methodologies can also provide accurate anatomical information for device developers or in the bench testing of new or existing devices.

In our section on interventions on hypertension and stroke, **Steffen Gloekler, Bernhard Meier and colleagues** compare left atrial appendage closure (LAAC) to medical therapy (OAC) in patients with atrial fibrillation (AF) in the APPLY study. With 500 consecutive patients in each arm of the study, and after a mean follow-up time of 2.7±1.5 years, LAAC demonstrated clinical benefits over medical therapy. This article is accompanied by an editorial by **Petr Widimsky and Pavel Osmancik**.

In our section on interventions for valvular disease and heart failure, **Rodrigo Modolo, Patrick W. Serruys and colleagues** offer their special insight on the quantitative assessment of aortic regurgitation. As indications for TAVI expand and the use of general anaesthesia diminishes, the use of transoesophageal (TEE) or transthoracic echocardiograms (TTE) during TAVI is limited, while the need remains for a thorough assessment of paravalvular aortic regurgitation (AR) post-TAVI, where more than mild AR can be corrected. The authors explore the "re-emergence" of aortography as a "valuable tool for periprocedural AR assessment", describing a "novel technique" – the quantitative assessment of AR using the aortogram with video-densitometry. They look to validate this method in TAVI further as well as its use in clinical trials or in assessing "regurgitation in other valve procedures, such as mitral and tricuspid".

Alison Duncan, Simon Davies and colleagues provide us with a short report on "valve-in-valve" TAVI (ViV-TAVI) for bioprosthetic aortic valve replacement (AVR). This single-centre study looks at ViV-TAVI for degenerated homograft AVR as compared to conventional redo surgery.

Gilbert H.L. Tang, Danny Dvir and colleagues focus on the BASILICA technique (the bioprosthetic or native aortic scallop intentional laceration to prevent iatrogenic coronary artery obstruction) in light of the Valve-in-Valve International Data (VIVID) registry. The VIVID data are used to describe a novel anatomical classification of aortic root types, with the authors providing an algorithm for identifying which root anatomy is at risk and might benefit from the BASILICA approach.

And finally, what do you think? Whether you use a transfemoral or transradial approach, has the time come to standardise vascular access in transcatheter cardiovascular procedures? That's the subject of a special editorial perspective by **Francesco Burzotta and Dariusz Dudek**. Are you ready to answer their call?

That's it for this month's electronic edition, but, as always, whether it is a particular topic, cutting-edge technique or a breaking trial, we hope we respond to the subjects and interests of you our readers. Please let us know what you think.