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IN THIS ISSUE OF EUROINTERVENTION

Infective endocarditis after TAVI; IVUS assessment in valve-in-valve procedures; a mini focus on antithrombotic therapy in coronary interventions; an EAPCI position statement on elective procedures during COVID-19; and more...

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A couple of weeks ago I received an email announcing that the next CRT Congress, a traditional appointment at the beginning of the year for interventional cardiology, would be transformed this year into a digital event. While this type of announcement no longer amazes anyone these days, I still believe that, in this particular instance, it assumes a more profound meaning.

CRT was the last international event many interventional cardiologists physically attended in 2020. It was the intention of the organisers to make this latest event the first one allowing our physical presence in 2021. The rest is history - things just didn't improve as fast as we imagined. Even with the vaccines becoming available, it will take several months before the so-called "herd immunity" sets in, so setting a calendar date for a supposed "return to normal" seems an impossible feat at the time of writing this.

It seems clear then that 2021 will still be marked by many digital events – CRT, for one, but also many of the traditional events planned for later in the year – including the ESC Congress, which, despite its late summer date which allowed us to imagine the opposite, has been announced as digital as well.

After a year of webinar experience, for every merit that these events surely have, I also find a flaw, and vice versa, which makes it difficult for me to express a clear-cut opinion. What is auspicious, for me at least, is that, after having tried or been subjected to every possible and imaginable broadcasting system for one of these sessions, we need to have some form of standardisation. For instance, faculty all around the world may have experienced: 1) recorded sessions with no cuts to be broadcast on a deferred basis; 2) sessions recorded with television edits; 3) sessions with pre-recorded single presentations and live discussion; 4) hybrid sessions with hosts in the studio and guests at home; 5) sessions with self-produced presentations (i.e., slide casts); and, believe it or not, 6) slides with no audio. The number of platforms and software we have had to get used to is incalculable, as are the hours of technical preparation to make sure that everything is in place. At times, faculty participants of these sessions are not sufficiently informed about which of the aforementioned modalities will be used. This confusion may create unintentionally surreal situations, which I witnessed in 2020: moderators who do not know they are live; conflicts between technicians and organisers; arbitrary interpretations of the concept of a "5-minute talk"; epochal battles with the "sharing" button; and the reiteration of that new catchphrase "you're on mute". Well, while waiting for certainties from this digital world, let's focus on our printed pages. Here is what we've prepared for you in this issue of EuroIntervention.

We begin with interventions for valvular disease and heart failure and a review article by Anna Conen, Andreas F. Widmer and colleagues on the emergence of infective endocarditis after TAVI. With rates similar to those seen in SAVR, the authors consider the protocols and management of infection control, looking at interim recommendations based on guidelines from the WHO or various European and international professional societies. Different antibiotic protocols are examined. Infection control is clearly justified because infective endocarditis after TAVI, often related to the TAVI procedure itself, has a high mortality rate. The current approach is endorsed by the International Society for Cardiovascular Infectious Diseases, while we wait for the completion of large, randomised trials.

In our next article, **Herbert Kroon, Nicolas M. Van Mieghem and colleagues** examine the role of cerebral embolic protection after TAVI. The authors perform histopathological and semiquantitative analysis of debris captured by the SENTINEL cerebral embolic protection device in patients undergoing TAVI using different types of transcatheter heart valve, with the amount of debris captured seen to be similar across the different platforms, though the composition of the debris could vary. They conclude that valve repositioning carries a higher risk for dislodging more debris to the brain. This article is accompanied by an editorial by **Rodrigo Bagur and Luciano A. Sposato**.

This section also includes a short report by **Michele Pighi, Flavio Ribichini and colleagues** looking at the feasibility of IVUS assessment of the coronary ostia after valve-invalve TAVI as a way of predicting or preventing possible coronary artery occlusions, thus helping in the decision as to whether or not to stent.

Moving to the coronary section, our mini focus in this issue is on antithrombotic therapy. It begins with authors **Masato Nakamura**, **Yoshitaka Murakami and colleagues** presenting the PENDULUM registry, a *post hoc* analysis to ascertain whether Academic Research Consortium for High Bleeding Risk (ARC-HBR) criteria apply to Japanese PCI patients. Results of the analysis suggest that ARC-HBR criteria are to a certain degree applicable

in these patients, with severe chronic kidney disease, anticoagulant use, acute coronary syndrome, low body weight and heart failure being independent predictors of major bleeding. An editorial by **Giuseppe Gargiulo and Giovanni Esposito** comments further on this subject.

Our mini focus continues with the MIRTOS study by **Michalis Hamilos**, **Panos Vardas and colleagues**. This study compares ticagrelor to clopidogrel in ST-elevation myocardial infarction patients undergoing thrombolysis to determine which is superior in improving coronary microvascular function. While neither regimen proved superior in terms of microvascular injury, the study did show that thrombolysis with ticagrelor in patients <75 years appeared to be safe. This article is accompanied by an editorial by **Petr Kala**.

The mini focus now turns to the TALOS-AMI trial by authors Mahn-Won Park, Kiyuk Chang and colleagues. The design of this multicentre, randomised trial is to measure the efficacy and safety of a dual antiplatelet therapy de-escalation strategy involving switching acute myocardial infarction patients with no adverse events during the first month after PCI from ticagrelor to clopidogrel. The primary endpoint is a composite of cardiovascular death, MI, stroke, and bleeding type (according to BARC criteria) 1 to 12 months after the index PCI.

Moving away from antithrombotic therapy, Alaide Chieffo, Dariusz Dudek and colleagues present the EAPCI position statement on elective interventional cardiology procedures during the COVID-19 pandemic. With healthcare systems facing successive waves of the virus, the interventional community needs to consider the problems involved in treating non-COVID patients: which patients or procedures should be prioritised, and what preventive measures should be put in place to protect the patients as well as the specialists or other health professionals.

Continuing with coronary interventions, **Krzysztof Milewski**, **Patrick W. Serruys and colleagues** present the six- and 24-month results from the DESSOLVE III OCT study with patients randomised to either the MiStent or the XIENCE stent. The authors write that, while the MiStent had a more favourable efficacy for preventing neointimal growth with comparable strut tissue coverage at six months, this inhibition decreased at 24 months when compared with the XIENCE stent.

Authors Masahiro Hoshino, Tsunekazu Kakuta and colleagues assess the prognostic value of thermodilution-derived coronary flow capacity (T-CFC) in patients with stable CAD and deferred revascularisation. By defining ischaemic T-CFC as either mild, moderate, or severely reduced, the authors have provided improved risk stratification of both vessel-oriented composite endpoints and major adverse cardiac events which, in these patients, offers an incremental predictive value above FFR or CFR alone. This article is accompanied by an editorial by Mauro Echavarría-Pinto and Tim P. van de Hoef.

Another article in coronary interventions is the subject of an article by **Aung Myat, David Hildick-Smith and colleagues** who pose the question as to whether revascularisation of an infarct-related artery chronic occlusion could modify in a positive fashion the size and composition of the myocardial scar, responsible for ventricular tachycardia. This could suggest that, in a subset of patients with coronary artery disease, CTO PCI would be a viable indication.

There is more, so let's enter the "real" Journal itself now.