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IN THIS ISSUE OF EUROINTERVENTION

**A State of the Art on completeness of revascularisation in acute coronary syndromes; device entrapment in CTO-PCI; microvascular perfusion measures; a mini focus on drug-eluting stents; transcatheter mitral valve implantation in patients with prior transcatheter or surgical aortic valve replacement; atherectomy versus surgery in common femoral artery lesions; and more...**

**Davide Capodanno**, *Editor-in-Chief*

To those who argue that the journey is more important than the destination, I would remind you that there are certain three- to four-hour plane trips where you are so uncomfortable that the most you can do is to hope it will end soon. I always think about it every time I close my laptop after a virtual meeting. “The meeting is over, so under normal conditions I’d be rushing to the airport now”.

At the end of a virtual meeting, you are already where you need to be and I wonder if it isn’t better this way – less travel, less pollution, more free time – or, if not, was it better before – interaction, networking? Believe me, I can’t make up my mind. Everyone has their own opinion on these virtual meetings. Maybe one day someone

will write a book on the pros and cons of this new endurance test that forces you to sit in front of the screen several hours more than you would have in the past. Yet, there are all the hours you would otherwise have spent on a plane, so I'm not so sure, in the end, that it's all that different.

One thing is for sure – some video calls are tiring, not to mention superfluous (and I say this with the utmost respect). Statistics show that, with the pandemic, the number of video calls has skyrocketed, certainly generating opportunities, but also new sources of stress (so-called “Zoom fatigue”, a sort of encirclement syndrome where calendars are populated with several requests for presence online). Video conferences are a practical and easy tool to organise – perhaps too easy since they tend to saturate our planning. When they are aimed around concrete, collaborative objectives, they replace endless hours of remote missions and individual work. But when they are organised in the hope of making things go forward, as if by inertia, that's where I think we need to take note. Also, the rule is that the more useless the event for participants, the more temptation there is to multitask, which ultimately frustrates all present.

Think about it when organising your next one: is it really essential for my project? Do you really need an hour for something that can be accomplished by a simple e-mail? Remember, especially because in an hour you can do so many beautiful things (and this is where I am heading) ... including reading some of the articles in this issue of EuroIntervention.

We begin with a EuroIntervention State of the Art looking at the recommended levels of completeness in the revascularisation of patients with acute coronary syndrome and multivessel disease. After considering the latest evidence and practice, authors **Valeria Paradies, Pieter Cornelius Smits and colleagues** call for complete revascularisation not only of the culprit lesion but also of the non-culprit lesions in all acute coronary syndrome patients, except in cases of cardiogenic shock. While more research is still warranted, faced with the multiplicity of anatomies, some unsuitable for percutaneous coronary intervention, other approaches can be chosen which include medical management or coronary artery bypass graft, with the Heart Team involved in more complex situations.

In coronary interventions, **Sung-Jin Hong, Yangsoo Jang and colleagues** look at the impact of pre-stenting evaluation using intravascular ultrasound on acute procedural outcomes. The authors underline the usefulness of performing intravascular ultrasound before stenting, with improved results seen, especially, in patients with acute myocardial infarction and small vessels. This article is accompanied by an editorial by **Takashi Kubo and Yasutsugu Shiono**.

The incidence and management of device entrapment during the percutaneous coronary intervention of chronic total occlusions has been limited, until now, to anecdotal reports. In their study, **Gabriele-Luigi Gasparini, Roberto Garbo and colleagues** provide an overview of the potential causes as well as eventual management techniques of device entrapment during chronic total occlusion revascularisation. The authors note a low incidence and high procedural retrieval success rate in a series of device entrapments when performed by experienced operators and provide the necessary insights essential to optimising outcomes when faced with these rare complications.

**Annette M. Maznyczka, Colin Berry and colleagues** propose a novel parameter to measure failed microcirculatory reperfusion - thermodilution-derived temperature recovery time. This parameter, which predicts microvascular obstruction and prognosis, could identify better which patients are likely to benefit from adjunctive treatments during primary percutaneous coronary interventions. While further clinical research is needed, this measurement, which is independent from the index of microcirculatory resistance, could prove to be a useful tool in risk stratification. The article is accompanied by an editorial by **Adrian P. Banning and Giovanni Luigi De Maria**.

Invasive assessment of the coronary microcirculation is the subject of a short report by **Daniëlle C.J. Keulards, Nico H.J. Pijls and colleagues**. The selective measurement of absolute coronary blood flow and microvascular resistance with thermodilution using a specific invasive technique is validated, reproducible and operator-independent. This is the first study to look at the long-term safety and absence of complications of this technique for daily clinical practice. It could prove to be a useful procedure when faced with the many patients who experience angina, but do not present with significant epicardial stenosis when examined.

This month, our mini focus looks at drug-eluting stents, beginning with an article by **Manel Sabaté, Jens Flensted Lassen and colleagues** on the BioFreedom QCA trial. The novel BioFreedom Ultra drug-coated stent with a thin-strut cobalt-chromium platform was seen to be non-inferior when compared to the BioFreedom drug-coated stent with a thicker, stainless steel platform. These results promise improved performance of this new iteration of the BioFreedom system.

In the next article of our mini series, **Guillaume Marquis-Gravel, Mitchell W. Krucoff and colleagues** examine the use of drug-coated stents versus bare metal stents in high bleeding risk patients, defined by Academic Research Consortium criteria. The authors combined data from the LEADERS FREE and LEADERS FREE II studies, determining that the subset of patients in the high bleeding group clearly benefited from the use of drug-coated stents, which were demonstrated to be safer and more effective than bare metal stents in this population. This article is accompanied by an editorial by **Ron Waksman and Charan Yerasi**.

The mini series continues with preclinical research reported by **Hiroyuki Jinnouchi, Aloke V. Finn and colleagues** comparing the thromboresistance and albumin retention of three drug-eluting stents. Will the differences they find between these stents deepen our understanding of the suitability of different durable polymer drug-eluting stents in shortening dual antiplatelet therapy?

In the section on valvular disease and heart failure, a short report from **Maurizio Taramasso, Lenard Conradi and colleagues** demonstrates the feasibility and safety of transcatheter mitral valve implantation using the Tendyne device in patients who previously underwent transcatheter or surgical aortic valve replacement.

Finally, in peripheral interventions, authors **Tanja Böhme, Aljoscha Rastan and colleagues** evaluate directional atherectomy as an alternative to surgical endarterectomy for the treatment of common femoral artery lesions. While more studies are still needed, results are promising with limited complications.

Thanks for your continued interest in EuroIntervention. Let's now see what we have in store.