

OCTOBER 2020

Volume 16, Issue 8

IN THIS ISSUE OF EUROINTERVENTION

A mini focus on radiation protection, ticagrelor monotherapy and DAPT in ACS and long coronary lesions, a randomised clinical trial of bioresorbable scaffolds for patients at high risk for restenosis, initial outcomes of the BASILICA technique and more...

Davide Capodanno, *Editor-in-Chief*

At the end of last year, at the time of the annual scientific sessions of the American Heart Association, I remember we all talked about nothing but the ISCHEMIA trial for which we now know many things, while many others are still being revealed little by little. On the day of the presentation, in the absence of simultaneous publication, the question arose as to how to quickly access the results of the study. In this age of digitisation it may seem like a small matter, and it probably is, given that embargo rules normally require that, as soon as the speaker begins to articulate the first words, an article is already being published online on the main medical news sites. Journalists have the duty to remain silent until the embargo is lifted, but they know the results in advance to allow them to prepare their articles. This is made possible through press conferences that often function as mini-sessions for a closed circle, where the presenter has a few minutes to distil the essence of the trial, and where there is even a panel for the first hot comments to be captured in the stories. These comments are the freshest and most genuine – there will always be time for ones with more depth later.

All this to say that the interested audience does not have to wait long for its curiosity to be satisfied, and yet the presentation of a trial remains a time of great anticipation and participation. Call it the playful side if you want, but I think it is rather the fascination of science. It's like watching a movie in a cinema rather than on your television. You go to the cinema because the film was conceived for that environment, and that's where you want to enjoy it. However, if in November 2019 you didn't happen to find yourself by chance where the conference was held (i.e., in Philadelphia), we'll need to go back to our starting point: how do you "live" the results of the trial "live", without mediation and with that same sense of excitement and anticipation, even if you are miles and miles away? Twitter is a good surrogate in these cases, but on that day I would have expected anything but an on-site participant to start a live stream using her smartphone. At this moment you also wonder what the organisers must be thinking, considering that the participants pay a registration fee. In principle, amplifying the echo of the congress beyond its physical confines is a good thing for a consenting organisation, but the rules in this domain are still somewhat opaque. But what isn't, in the age where everything is filmed and shared?

It is interesting to note that this reflection has now been overtaken by reality: due to the ongoing pandemic, all the major events of the current year have been online, and broadcasting the presentation of the great trials for free and "live" has become the rule, rather than a slightly stealthy exception. How long can it last? Certainly, even medical journals must take up the challenge of changing times and equip themselves with sharing platforms that allow scientific information to travel rapidly, in a semi-instantaneous manner.

Let's talk about our strategy another time, because now's the moment to look at what's boiling in the pot this month.

The challenge of ensuring our safety when using radiation is this month's mini focus, with an editorial by **Robert A. Byrne** et al offering an historical overview of the subject and introducing two current studies concerning radiation protection. The first is on ESPRESSO, an all-comer randomised trial by **Remzi Anadol, Tommaso Gori and colleagues**, which looks at three different methods of reducing operator exposure to scattered radiation in radial coronary catheterisation – shield-only protection, shield and an overlapping 0.5 mm Pb panel curtain, and a shield, curtain and an additional 75×40 cm, 0.5 mm Pb drape placed across the patient's waist. With a primary endpoint of the relative exposure ratio between the operators' exposure and the patient's exposure, the use of the additional drape was seen to reduce the radiation exposure of both the first operator and the second operator during routine radial procedures. In the second, **David M. Leistner, Barbara E. Stähli and colleagues** present the RAMBO trial, comparing differences in radiation exposure in biplane versus monoplane coronary angiography and PCI. Four hundred and thirty patients were randomly assigned to biplane or monoplane imaging. The results demonstrated that the operator radiation dose was significantly higher in the biplane group, leading the authors to conclude that "monoplane imaging should be considered for advanced radioprotection in cardiac catheterisation" and biplane imaging limited to certain specific cases.

Continuing with coronary interventions, **Anna Franzone, Marco Valgimigli and colleagues** examine the efficacy of ticagrelor monotherapy after one-month dual antiplatelet

therapy (DAPT) in patients with or without acute coronary syndromes (ACS). A substudy of the GLOBAL LEADERS trial, the GLASSY study included 3,840 ACS patients and 3,745 with stable ischaemic heart disease (SIHD). A consistent treatment effect in ACS was demonstrated, with a favourable bleeding profile in ACS, but not in SIHD patients. This paper is accompanied by an editorial by **Usman Baber and Roxana Mehran**.

Also coming out of the GLOBAL LEADERS trial, **Kuniaki Takahashi, Patrick W. Serruys and colleagues** present a *post hoc* analysis of a ticagrelor monotherapy protocol, here in patients receiving increasing total stent length (TSL), something associated with higher risks of ischaemic events. The experimental strategy of one-month DAPT followed by 23 months of ticagrelor monotherapy significantly reduced the primary endpoint of a composite of all-cause death and new Q-wave myocardial infarction in patients who had received a TSL ≥ 46 mm with a bleeding risk of BARC type 3 or 5 similar to that of shorter stents. Though potentially balancing ischaemic and bleeding risks at 2 years in these patients, the “real benefits” of ticagrelor monotherapy for patients with long stents was once again primarily seen in ACS patients.

Turning to bioresorbable scaffolds (BVS) and everolimus-eluting stents (EES), which of these offers better outcomes in patients at high risk for restenosis? This is the question posed by **Pieter C. Smits, Robert-Jan van Geuns and colleagues** in the COMPARE-ABSORB trial where these two devices were randomised. While the non-inferiority of BVS compared with EES in terms of target lesion failure (TLF) was demonstrated at one year, BVS still carried a higher risk of device thrombosis and target vessel myocardial infarction (TVMI) than EES. This article is accompanied by an editorial by **Dean J. Kereiakes**.

Treating bifurcations is the subject of an article by **Taku Asano, Robert J. Gil and colleagues**. The POLBOS LM trial protocol is designed to look at the efficacy and non-inferiority of the BiOSS LIM C, a dedicated sirolimus-eluting cobalt-chromium bifurcation stent used in the treatment of left main coronary artery disease (LMCA) with a pre-specified performance goal based on the results of the recent EXCEL trial allowing comparison with the XIENCE stent.

In the interventions for valvular disease and heart failure section – accompanied by an editorial by **Josep Rodés-Cabau and Henrique B. Ribeiro – Mitsunobu Kitamura, Mohamed Abdel-Wahab and colleagues** present a review of the Leipzig experience using “bioprosthetic aortic scallop intentional laceration to prevent iatrogenic coronary artery” obstruction – the BASILICA technique. BASILICA proved to be safe and effective in this small cohort involving 21 degenerated bioprosthetic leaflets and two native leaflets; however, it is a complex technique requiring “demanding catheter manipulation” and a profound comprehension of three-dimensional aortic root and coronary anatomy. A cerebral embolic protection device was used in 20 (95%) patients. The technique demonstrated a technical success rate of 95% and a procedural success rate of 90% with no mortality or stroke observed at 30 days. The authors highly recommend larger multicentre studies with longer follow-up to clarify further and define this “emerging technique”.

That’s it for this issue of the Journal. As always, we look forward to your feedback, reactions and comments on EuroIntervention. Next month, we will be focusing on the PCR Valves e-Course – and the virtual experience we will be offering for yet another “online” congress.