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IN THIS ISSUE OF EUROINTERVENTION

A State-of-the-Art on antiplatelet therapy post-PCI; peripheral intravascular lithotripsy for transfemoral TAVI; predictors of TAVI outcomes; a meta-analysis of mechanical thrombectomy for ischaemic stroke; transseptal puncture sites for percutaneous LAAO; the IN.PACT BTK trial; and more…

Davide Capodanno, *Editor-in-Chief*

For years at EuroIntervention we have dreamt of producing a podcast.

This is not an unprecedented idea; other Journals do it periodically and with some success, so there is no reason that one day we cannot do one as well.

In the meantime, our social media team, led by Salvatore Brugaletta, produce a series appearing periodically on Twitter called "EIJ on Air" (#EIJonAir), that features interviews with the authors of our most read and appreciated papers. This short, in-depth video series is growing in appreciation and popularity and I warmly invite you to follow.

But some readers have told me that a podcast is a podcast. It's useful when you don't have the time to read an article in its entirety, but you have a few spare moments during the day when you're driving, running or taking a walk. So, we asked ourselves, why not listen to an article itself instead of a commentary?

This is how the EuroIntervention revoluSOUND project was born: a new EuroIntervention feature that expands our user experience by providing a way to listen to individual articles and editorials (though in this initial pilot phase, only abstracts for original studies will be available). All these texts are entrusted to a machine learning system that – after a few easy steps – makes the reading of technical terms precise and comprehensible (fun fact: our discipline is full of acronyms and educating a machine to recognise and read them properly is a great challenge for artificial intelligence).

Being able to listen to an article is another stage in the digital transition of our publication that we often talk about – and which you can find traces of here as well as in our communication channels. As our regular readers are always avidly demanding innovation, revoluSOUND is yet another demonstration that EuroIntervention is vital and accessible in many ways, never invasively, but always adapting to your personal needs in terms of how you want to be informed and how you want to learn. So whether you are among those who love to hear the rustle of the printed page under your fingers, or are attuned to an artificial intelligence voice reading while you're doing something else – or anywhere in between – there is one constant that always remains: the selected content comes from the best articles that are submitted to us.

Here are the ones in our current issue.

We begin with the State-of-the-Art on antiplatelet therapy after percutaneous coronary interventions (PCI) by **Dominick J. Angiolillo, Michelle L. O'Donoghue and colleagues**. Over the past years, not only have the devices and technology evolved, but there has been an increased diversity in antiplatelet regimens, both in their duration and in the agents used. The authors review our current knowledge concerning the prognostic implications associated with bleeding, which has in turn led to a more nuanced approach to antiplatelet treatments and our ability to stratify patients according to their ischaemic and bleeding risk. Platelet function and genetic testing are also considered in the selection of $P2Y_{12}$ inhibitor therapy. This is all with the goal of developing a more personalised antiplatelet regimen for each individual patient undergoing PCI based on an integrated approach, using ischaemic and bleeding risk definitions, procedural characteristics, and tools to help assess drug response.

Performing transcatheter valve implantation (TAVI) using the transfemoral (TF) approach in the presence of severe calcific atherosclerosis at the iliofemoral axis is challenging. **Giulia Nardi, Carlo Di Mario and colleagues** study a novel intravascular lithotripsy approach which could enable TF TAVI in patients with peripheral artery disease who often have a higher risk during valve deployment of adverse events and complications as well as failure of percutaneous closure devices leading to access-site bleeding. The use of intravascular lithotripsy was seen to be safe and, by modifying arterial compliance, allowed for the crossing of heavily calcified iliofemoral axes with various TAVI delivery systems. This article is accompanied by an editorial by **Thomas Zeller**.

Is there an association between preoperative renal cortex thickness and changes in renal functions after TAVI? **Akihiro Ikuta, Yasushi Fuku and colleagues** explore this question using multidetector computed tomography before TAVI, taking renal morphological measurements and studying the estimated glomerular filtration rate (eGFR) improvement or deterioration. They found that renal cortex thickness had a clear correlation with changes in eGFR which could be a useful tool in predicting renal function changes in patients undergoing TAVI.

To further optimise patient selection for TAVI, especially in those patients at low risk for surgery, **Lara Waldschmidt, Niklas Schofer and colleagues** studied the prevalence of left ventricular outflow tract (LVOT) calcification and its impact on TAVI outcomes. They saw that patients with a high level of LVOT calcification demonstrated worse short-term clinical and functional outcomes as well as higher one-year mortality, concluding that LVOT calcification should definitely be taken into consideration by the Heart Team when determining which approach to take.

Whether using a retrievable stent or an aspiration catheter, mechanical thrombectomy is widely seen as the standard for the management of ischaemic stroke. In a meta-analysis looking at 12 recent trials in patients with acute large-vessel anterior circulation ischaemic stroke, authors **Christopher A. Rajkumar, Matthew J. Shun-Shin and colleagues** confirmed that patients treated by mechanical thrombectomy had overwhelmingly positive results as compared to other treatments, with reduced disability and mortality as well as improved long-term neurological outcomes. For every 5.4 patients treated with thrombectomy, one fewer patient was functionally dependent at 90 days. This article is accompanied by an editorial by **Petr Widimský and Dusan Kucera**.

While transseptal puncture is recommended for percutaneous left atrial appendage (LAA) closure, anatomy can impact the best site. Based on cardiac computed tomography (CCT) analysis, **Motoki Fukutomi, Ole De Backer and colleagues** studied the spatial relationship of the LAA to the fossa ovalis, examining the consequences on transseptal puncture. They recommended an inferoposterior transseptal puncture be used in the majority of procedures, though in certain anatomies an inferior but more central/anterior transseptal puncture should be employed.

Results using drug-coated balloons in the treatment of below-the-knee lesions in patients with chronic limb-threatening ischaemia have been mixed. In the IN.PACT BTK randomised trial, authors **Francesco Liistro, Antonio Micari and colleagues** explored the safety and effectiveness of the IN.PACT 014, a new paclitaxel-coated balloon catheter which they compared with conventional percutaneous transluminal angioplasty for infrapopliteal chronic total occlusions. Early results show no differences in safety or revascularisation events between the two groups, opening the door for further studies. This article is accompanied by an editorial by **Konstantinos Katsanos and Lorenzo Patrone**.

And now on to the "real" articles themselves.