The Challenge of Percutaneous Treatment for Chronic Coronary Occlusions

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The percutaneous treatment of chronic coronary occlusions is the latest and greatest challenge for percutaneous myocardial revascularisation. New devices and techniques have increased the success of the procedure, which can currently reach 90% in highly specialised services. In his Special Article, Toshiya Muramatsu, of Saiseikai Yokohama-City Eastern Hospital (Yokohama-Kanagawa, Japan), provides recommendations for selection among the wide variety of dedicated devices for the correct among angiographic evaluation of chronic occlusion cases and explains the antegrade and retrograde approaches of those lesions. He also proposes alternatives for addressing obstacles during the procedure, shows examples of apparently unapproachable cases, and presents the casuistry of his service, with surprising results.

This edition of the Revista Brasileira de Cardiologia Invasiva (RBCI) also contains very interesting original articles and editorials. Andrade et al., from the Irmandade da Santa Casa de Marília (Marília, SP, Brazil), evaluated the impact of the radial approach on the incidence of bleeding in a large cohort of elderly patients undergoing percutaneous coronary intervention. Percutaneous procedure-related bleeding, particularly in the elderly, is a source of persistant concern, primarily due to its association with greater mortality. Experience with the technique results in a high success rate without the need for conversion to an alternate access route and very low rates of severe bleeding. In their editorial, Hsieh and Jolly, from McMaster University (Hamilton, Canada), comment on the technical challenges frequently faced when using the radial approach, particularly in the elderly. However, they defend this approach as the standard for experienced professionals.

In another article, Ferreira et al., from the Hospital Universitário Pedro Ernesto (Rio de Janeiro, RJ, Brazil), evaluated the cost-effectiveness relationship of pharmacologic stents through the use of sophisticated statistical tools. In the investigated population, they demonstrated that pharmacologic stents were not cost-effective; however, using the propensity score, they demonstrated specific subgroups in which those devices presented economic benefits by avoiding restenosis. In a related editorial, Feres et al., from the Instituto Dante Pazzanese de Cardiologia (São Paulo, SP, Brazil), analysed this complex topic, showing the challenge of determining cost-effectiveness. They explain that the additional cost per restenosis avoided is influenced not only by the difference in the cost of drug-eluting and bare-metal stents but also by the performance of the drug-eluting stent used in the study (first-generation stent with paclitaxel release) and other variables not included in the analysis.

Metzger et al., from the Instituto Dante Pazzanese de Cardiologia (São Paulo, SP, Brazil), discussed extracardiac percutaneous interventions. They reported the initial results of treating infra-renal aortic abdominal aneurysms with complex anatomy using an endoprosthesis with a second-generation round metallic framework. In their initial experience, they showed immediate satisfactory results in patients presenting aneurysms with a sharp angulation of the proximal neck or located in the emergence of the iliac arteries. In a very educational editorial, Claudia M. R. Alves, from the Escola Paulista de Medicina (São Paulo, SP, Brazil), explains that the point of greatest vulnerability of the procedure is in the landing neck of the prosthesis where observing the limits of diameter, extension, and angulation of the proximal and distal necks is crucial for appropriate patient selection. She recommends individualisation of treatment in patients with hostile anatomy, and reminds us that training and experience are essential to the success of the procedure. She additionally notes that complex cases should be treated at large reference centres, always ensuring that patients are aware of the risks of prosthesis leakage and of need for vigilance.

Finally, we inform the readers that the Editorial Board has undergone significant restructuring, increasing the number of Associated Editors and members of the National Editorial Board to reflect the growing contributions of several national institutions to RBCI. We have also created Editor positions for Case Report, Images in Cardiovascular Intervention, and Extracardiac Interventions as well as Regional Editor positions for the North-Northeast, Central-West, Southeast, and South regions, in order to stimulate and capture local scientific contributions.

Good reading.

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Editor