

Scientific Basis for the Incorporation of (Not So) New Devices by the Brazilian Public Health System

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In Brazil, in several medical specialties, we often observe discrepancies between the Supplementary Health Care Network and the Unified Health System (Sistema Único de Saúde – SUS) regarding the offer of certified therapies for common diseases. In fact, over two-thirds of the population, who depend solely on the SUS, is deprived of the best that technology, can offer in healthcare. This is particularly true for the use of new devices in interventional cardiology. In pediatric cardiology, for instance, patent ductus arteriosus – one of the most common birth defects – has only coils approved for use by the SUS, which prevents percutaneous treatment for most patients. Among the many factors that hinder the adoption of new technologies by the SUS, economic factors predominate. In this sense, the search for robust scientific bases, which can help government agencies to make well-founded decisions, is very welcomed. Costa et al., from Hospital do Coração da Associação do Sanatório Sírio of São Paulo (SP), analyze the cost-effectiveness of percutaneous treatment vs. surgical treatment of patent ductus arteriosus from the perspective of SUS. Through stringent systematic review of the literature, the authors demonstrate the known safety and efficacy of the two techniques, as well as the lower morbidity and hospitalization time of percutaneous closure. The economic analysis showed that with a small reduction in the values of the prostheses, the percutaneous approach would attain an acceptable threshold for possible incorporation by SUS. Raul Rossi, Director of Interventions for Congenital Abnormalities of the Brazilian Society of Interventional Cardiology, in a corresponding editorial, recalls the growing gap that exists between the development of ever-better materials and their clinical use in Brazil. He questions, and appropriately so, how long the population of Brazilian children should wait to have access to devices long-used in other countries, including those already available in our country for those who have access to supplementary health care. Finally, he welcomes the important work of Costa et al., which contributes to a scientifically rigorous theoretical foundation, which the Ministry of Health can use to make decisions about the incorporation of new devices.

Three articles in this issue address aspects related to the use of the transradial approach. Barbosa et al., from Irmandade da Santa Casa de Misericórdia de Marília, Marília (SP), evaluate the incidence of radial artery occlusion at 24 hours and 30 days in patients with acute coronary syndrome submitted to invasive treatment, after the use of a selective compression device that aims to achieve hemostasis while maintaining antegrade flow. Espírito Santo et al., from Instituto do Coração, Faculdade de Medicina, Universidade de São Paulo, São Paulo (SP), describe trends in the use of transradial access for more than a decade in that institution. They analyze, over time, the use of the transradial and transfemoral approaches for coronary procedures, in a tertiary institution that includes a clientele treated through SUS and Supplementary/Private Health Care Network. Zukowski et al., from Santa Casa de Curitiba, Pontifícia Universidade Católica de Curitiba of Curitiba (PR), present the in-hospital outcomes of the transradial approach in an unselected population of patients older than 70 years submitted to percutaneous coronary intervention – a population that has a higher degree of atherosclerosis, calcification, and vessel tortuosity.

In an unpublished article, Armaganijan et al., from Instituto de Cardiologia Dante Pazzanese, in São Paulo (SP), explore the effects of percutaneous renal sympathetic denervation on renal artery diameter, as assessed by quantitative angiography. The increase in the diameter of renal arteries, if appropriately confronted with other methods that evaluate sympathetic activity, such as microneurography and norepinephrine spillover, can be a practical tool, easy to implement and low-cost, which will assist in better understanding the results of percutaneous renal sympathetic denervation.

In the endovascular area, Rodrigues et al., also from Instituto de Cardiologia Dante Pazzanese, evaluate outcomes at six months after using third-generation ultra-flexible nitinol stents in the treatment of atherosclerotic lesions in popliteal artery segments. These are arterial segments near the knee joint, on which complex rotational, tension, compression, and stretching forces act may influence middle- and long-term clinical outcomes.

Finally, this issue brings other articles of great relevance, which evaluate questions, such as the immunohistochemical characteristics of coronary thrombi in diabetic patients with myocardial infarction with ST-elevation, the results of primary coronary intervention according to the total time of ischemia, the performance

of a titanium nitric oxide-coated stent in patients with multivessel coronary artery disease, and an algorithm for early removal of the femoral sheath.

Enjoy your reading!

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Editor