

Editorial



Elucidation of the Diagnosis and Treatment of Peripheral Arterial Disease

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Conflict of Interest

The authors have no financial conflicts of interest.

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► See the article “Medical Resource Consumption and Quality of Life in Peripheral Arterial Disease in Korea: PAD Outcomes (PADO) Research” in volume 48 page on 813.

Medical treatment is an important management axis of peripheral arterial disease (PAD), as the disease manifests as advanced systemic atherosclerosis. PAD is considered a coronary artery disease (CAD) risk equivalent.¹⁾ Moreover, all-cause mortality is closely linked to the occurrence and severity of PAD, reaching 20% annually in patients with limb-threatening manifestations. Management for PAD patients must include the optimal medical treatment for reducing the risk of cardiovascular complications, including cardiovascular death, myocardial infarction (MI), and stroke.²⁾ Although the disease is a serious burden on patients' health, registry-based studies about the current situations of diagnosis and treatment of PAD from the Korean Medical Society are limited,^{3,4)} unlike international studies.^{5,6)} In this issue of *Korean Circulation Journal*, Rha et al.⁷⁾ reported the analysis of multicenter, large-scale data, which may have considerable implications, which include the following.

First, Rha et al.⁷⁾ reported important facts about the current treatment situation for PAD. The authors reported that 94.1% of patients were receiving pharmacotherapy, mostly with antiplatelets, but reported a smoking cessation education rate of 12.5% and exercise education rate of 23.8%. These results could imply that the non-pharmacological approach is being neglected in many patients, even though the current guideline recommends it as a class I or IIa recommendation for smoking cessation and exercise.⁸⁾ Second, most patients had visited non-internal medical hospitals. In some respects, visiting orthopedics and general clinics in advance of visiting tertiary medical centers is unavoidable among patients. Thus, screening in primary clinics becomes important. The simple ankle-brachial index (ABI) is known to be a tool for diagnosing many patients with an unrecognized PAD.⁶⁾ The authors reported that the mean number of previous visits before diagnosis and treatment is more than 1. Education and promotion of appropriate screening tests such as the ABI to non-cardiologists may shorten the time and reduce the cost of diagnosis of unrecognized PAD. Especially considering cost-effectiveness, ABI screening in primary clinics may be greatly useful for identifying those patients. Third, the quality of life (QoL) scores statistically improved after 6 months' follow-up. Considering that exercise, diet, and smoking cessation only accounted for only a small portion of the treatment modality, the major treatment effect might be from pharmacotherapy and revascularization. As the authors mentioned, QoL is reported to be a prognostic factor of patients with PAD.⁹⁾ If QoL could be improved by medication and percutaneous intervention, it must be conducted actively by practitioners.

The contents of the report are the author's own views and do not necessarily reflect the views of the *Korean Circulation Journal*.

Although Rha et al.⁷⁾ pointed several important results from large-scale data, the article has some limitations. First, the data used were based on a multicenter-registry database, and hospital-derived databases embed an exclusion of patients outside tertiary hospitals. Second, the report suggests symptom characteristics at baseline but still lacks symptom profiles in the treatment investigation. A treatment pattern analysis may provide more information with classification of the presence of symptoms, considering that symptoms may affect the treatment modality subtly.

The study by Rha et al.⁷⁾ informs practitioners about the current practice among patients before and after visiting a tertiary hospital. The importance of a guideline-based treatment and an appropriate screening test must be emphasized, in addition to non-pharmacological treatments. In the academic aspect, this study may serve as a basis and trigger for future prospective randomized studies by the Korean Medical Society.

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