

# Quality of Life and Peripheral Arterial Disease of Lower Members

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### Short Communication

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## Short Communication

Peripheral arterial disease (PAD) is one of the manifestations of atherothrombosis, systemic disease, which can affect all territories of the arterial tree. Recently, there has been a growing interest in the early identification of peripheral arterial disease (PAD) as a marker of atherothrombotic risk in other vascular territories, particularly the coronary and cerebral. However, the diagnosis of peripheral arterial disease (PAD) is limited since the proportion of patients with peripheral arterial disease is asymptomatic and therefore undiagnosed. In a study conducted in the primary care setting observed that 55% of patients with peripheral arterial disease, detected during their participation in the study, had not been previously diagnosed, while the percentage of patients with typical signs and symptoms of peripheral arterial disease was 11% [1,2].

It is known that the prevalence of peripheral arterial disease increases with age and reaches up to 20% of the population older than 65 years. The natural history of peripheral arterial disease is, in general, benign and few patients will end up developing serious complications in the lower limbs. The five-year risk of amputation is estimated at 2% in patients with intermittent claudication [3].

On the contrary, peripheral arterial disease is a strong marker of the existence of atherosclerotic disease in other vascular territories. In other words, peripheral arterial disease is a potent predictor of cerebral and coronary vascular events (stroke and myocardial infarction) and risk of mortality. Although patients with symptomatic peripheral arterial disease are those with the highest risk

of future events, it is also elevated in patients with asymptomatic peripheral arterial disease. Thus, mortality, in studies with a 10-year follow-up, showed that patients with peripheral arterial disease have a 3.1 times higher risk for mortality from any cause, and a 6.6 times higher risk of coronary heart disease consequences than patients without peripheral arterial disease, therefore it is of great importance to detect the disease in patients with peripheral arterial disease, both symptomatic and asymptomatic [4].

Cardiovascular diseases, specifically the different clinical manifestations of atherothrombosis, constitute the main cause of death in developed countries. The impact of atherothrombosis in the coming years will increase, it is expected that this authentic pandemic will continue to cause, despite medical-surgical advances, an increase in deaths and disabilities that will keep it in the first place between the relationship of causes of global burden of pathology in the year 2020 [1].

It has been a matter of enormous controversy to be able to elucidate precisely what is the frontier that divides primary prevention from secondary. Some patients may be carriers of numerous atherosclerosis plaques and fortunately never present an event or symptoms related to it (asymptomatic peripheral arterial disease). On the other hand, a patient may have a single plaque, which can lead to peripheral atherothrombotic complications (thrombosis, gangrene, amputation). However, there is greater uncertainty in order to differentiate those patients who have clearly suffered a peripheral atherothrombosis event from those in whom the presence

of the disease has been documented either because they have experienced symptoms or because diagnostic procedures have been performed to relieve the corresponding obstructions, but that have not presented an occlusive event. Also included in this category are individuals with a high absolute risk of presenting events because they carry numerous risk factors (diabetic, dyslipidemic, hypertensive, smokers). Therefore, within the same category called secondary prevention, patients with previous events are involved and those who still have no symptoms have presented events because this has been their natural history or because clinicians have intervened to change the natural course of their disease [5,6].

Chronic lower limb ischemia is an indicator of lesions that decrease the arterial blood flow of the lower extremities, and suppose a global impact on the patient, not only because of the difficulty of ambulation or night rest, but also because of the alteration of his daily work, his social, emotional and physical function, as well as his health perceived by the patient, that is, alters his quality of life [7].

Nowadays, most of the therapeutic actions carried out in developed countries are aimed not only at saving life, but at improving their quality. Therefore, to evaluate therapeutic effectiveness, parameters are required that assess factors that directly affect the patient, such as pain and physical and social function rather than clinical measures. The ankle/arm index (ITB), the improvement of the symptoms, the permeability, or the limb salvage are of interest especially for the doctor, but less for the patients, since the importance of any therapeutic action in these cases lies in its potential to improve the quality of life related to health, the possibility of a normal life [8,9].

In fact, one of the parameters that best assess the outcome of a specific intervention is the so-called QALYs. (Quality Adjusted Life Years) or quality-adjusted life years, which is a value that combines the duration and quality of life [10].

However, usually, in patients with chronic lower limb ischemia, the severity of symptoms is evaluated a priori, following the Fontaine or Rutherford classifications, hemodynamic involvement by measuring the ITB. and morphological involvement, with arteriography, echo Doppler or MRI angiography, but the impact of the disease on the quality of life is not evaluated, either due to lack of habit, lack of knowledge or the time it takes to perform the tests that they determine it [11,12].

The traditional objectives of intervention in patients with PAD have been symptomatic relief and limb salvage. In recent years, the importance of the functional result after the intervention as an assessment parameter has been recognized, the importance of these therapeutic objectives lies in the possibility of improving the quality of life related to health [13,14].

The natural evolution of PADs in the context of the different social medical changes (greater average life expectancy, with the consequent aging of the population, modification in eating habits, etc.), leads us to also evolve in the way of assessing to the patient. Therefore, not only will the patient be assessed in isolation, but we must contextualize it in their reality. In this reality, it becomes a necessity to evaluate how the patient coexists with the disease [15].

Defining the Quality of Life at the present time is a difficult challenge to face due to the socio-cultural evolution of the modern world and the huge differences between existing populations [16]. For WHO, the Quality of Life is "the perception that each individual has of their position in life, in the context of the cultural system and values in which they live and in relation to their goals, expectations, standards and concerns." [17].

Health-related Quality of Life (HRQL) is becoming increasingly important. It is used as a measure of levels of health and well-being in the individual and the population in general. Because some of the components of Health-related Quality of Life cannot be directly observed, they are evaluated through questionnaires that contain groups of questions and in theory, it is assumed that there is a true value of Quality of Life which can be measured indirectly by means of scales [18,19].

These instruments can be generic, those that are used in general and specific population that are for individuals with a certain disease or for a certain population group. They provide descriptive, predictive or evaluative information and produce values that reflect individuals' preference for their health conditions [20].

Health-related Quality of Life allows an approach to new approaches to what is intended to be health care based on "subjective health". Without a doubt, the need to include aspects related to the individual's perception of their well-being in health research represents one of the most important advances in health evaluations. Assessing the quality of life related to health in patients with peripheral arterial disease, allows us to approach the

identification of those who have a more affected physical or mental health, even when subjectivity predominates in each response [21-23].

Direct determinations of health-related quality of life in patients with PAD have been relatively uncommon. Feinglass, et al. They have described a modest baseline correlation between the ITB and the physical function of the SF-36. Currie, to the and Pell the demonstrated an initial increase in physical function and body pain scores of the SF-36 at 3 to 6 months of angioplasty or surgical revascularization, compared to exercise treatment. Chetter to they indicated that the scores of physical function, body pain, vitality and social function increased if the infrainguinal grafts continued to be permeable for a minimum of 6 months after the intervention. Similarly, Bosch observed an improvement in health-related quality of life, assessed by the SF-36, 24 months after the intervention [24,25].

The PAD, is one of the major causes of disability in the developed world, remains unnoticed in a first stage, but as it progresses it can cause intermittent claudication, rest pain and limb loss (amputations), in our country Approximately 1000 amputations are performed each year and according to data from the World Health Organization (WHO), the amputees comprise between 0.25 and 1.25% of the world population [26]. The main objective of the vascular surgeon when performing an intervention (surgical and / or endovascular) or another variant quality of life of the patient, and the improvement obtained after the treatment [27-31].

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