COST OF FOLLOW-UP AFTER A PERIPHERAL ARTERIAL EVENT IN PATIENTS WITH ATHEROSCLEROTIC CARDIOVASCULAR DISEASE IN SPAIN: RESULTS FROM THE REALITY STUDY

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INTRODUCTION

- Peripheral arterial disease (PAD) is a common manifestation of atherosclerosis, a cause of morbidity and mortality in developed countries and entails a high resource consumption and costs for health systems[1-3].
- These patients have an increased risk of suffering a new event with the consequent additional resource consumption and an increased follow-up cost[4,5].
- Despite this higher risk, PAD often goes unrecognized because symptoms are confused with other medical problems as musculoskeletal disorders, diabetic neuropathy, sciatica or venous disease[6].
- Although atherosclerotic risk factors as LDL-c were prevalent in these patients, they are often receiving suboptimal lipid-lowering treatments[6].

OBJECTIVE

The aim of this study was to estimate the average annual cost per patient with a new diagnosis or new episode of PERIPHERAL ARTERIAL DISEASE (PAD).

METHODS

- A retrospective observational study of the electronic medical records of patients from the BIG-PAC® database (patients from 7 integrated areas of 7 Spanish Regions; n=1.8 million) was carried out.
- Patients with a new/recurrent PAD episode between 1/1/2017 and 12/31/2018 were included.
- Direct healthcare costs (DHCC) were calculated from the consumption of resources during follow-up (two years from diagnosis) and the mean of the Regions official published tariff.
- The indirect non-health costs (INHCC) associated with the loss of productivity were determined.
- All costs were updated to €2021.

RESULTS

- The following tables show: the demographic features and follow-up events (table 1); the resource consumption - hospital admissions and visits (figures 1 & 2) and diagnostic tests (figures 3 & 4); the direct healthcare costs (table 2) and non-healthcare costs (table 3); and a cost summary (table 4).

Table 1. Demographics features and follow-up events (PAD)	
n	6,054
Age (years) (mean [SD])	69.6 (10.3)
Gender (Male %)	3,953 (65.3%)
Follow-up events	
New ASCVD event	1,614 (26.7%)
Deaths - n (%)	618 (10.2%)

Figure 1: Resource consumption: Visits (% Patients)

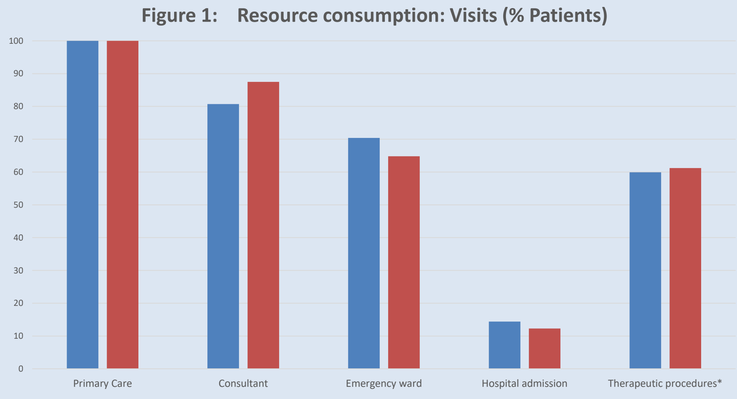

Figure 2: Resource consumption: Visits (average per patient)

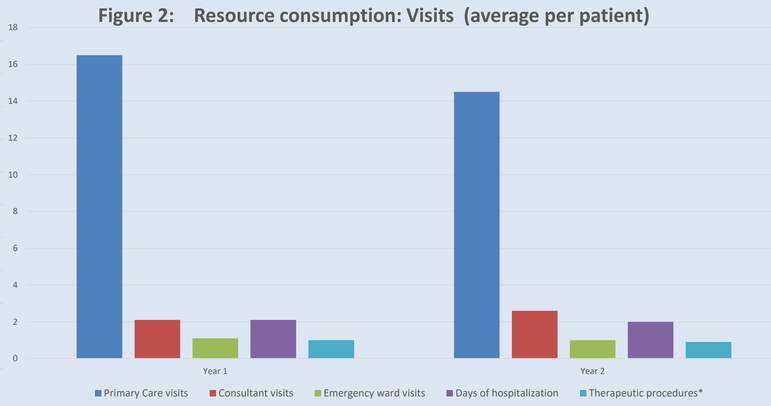

Figure 3: Resource consumption: Diagnostic (% Patients)

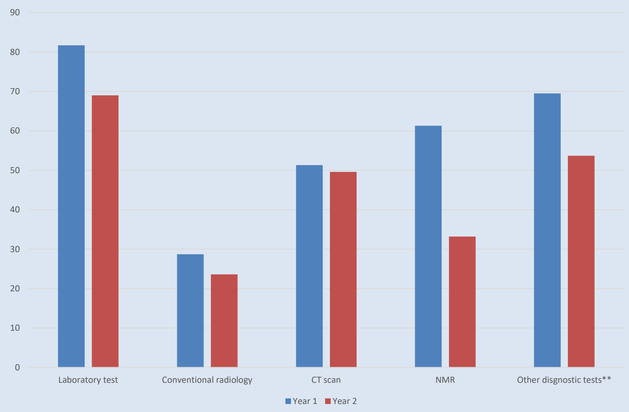

Figure 4: Resource consumption: Diagnostic (average per patient)

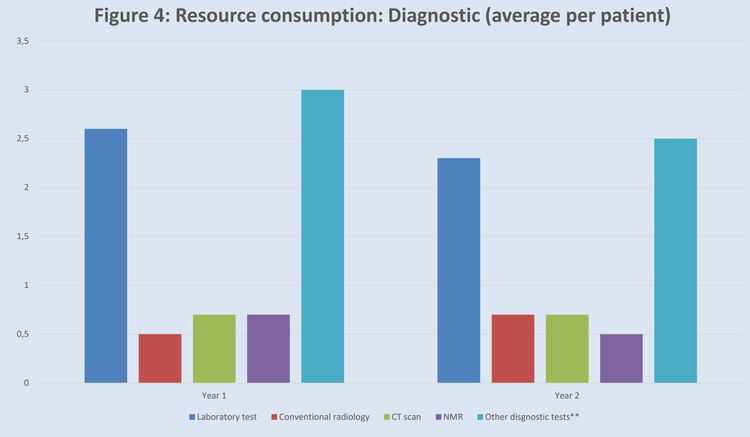

Table 4. Direct healthcare costs (average cost per patient)	Year 1	Year 2
Average cost per patient	**9,082 €**	**8,098 €**
Main drivers of cost		
Therapeutic procedures	4,339 €	4,123 €
Hospitalizations	1,297 €	1,226 €
Medication	1,207 €	1,076 €

Table 5. Non-healthcare costs (average cost per patient)	Year 1	Year 2
Sick leave ***	1,341 €	1,236 €
Permanent disability****	561€	572 €
Premature deaths *****	761 €	607 €
Non-healthcare costs	**2,663 €**	**2,415 €**

Table 6. Summary of Costs (average cost per patient)	Year 1	Year 2
Direct Healthcare cost	9,082 €	8,098 €
Non-Healthcare cost	2,663 €	2,415 €
Average cost per patient	**11,745 €**	**10,513 €**

*• Includes coronary artery bypass(percutaneous), angioplasty and endarterectomy/thrombectomy; ** Includes echocardiogram, stress test and cardiac holter; *** Sick leave due to temporally disability in the working population (under 65 y.o.); **** Permanent disability in the working population (under 65 y.o.); ***** Difference between the age of death and the retirement age in Spain.*

CONCLUSION

Patients with Peripheral arterial disease have a high mortality and represent a considerable social and healthcare cost. Developing preventive programs and controlling cardiovascular risk factors could help reduce mortality and cost for the Spanish National Health System.

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