

Treatment Costs of Comorbidities in Patients with Peripheral Artery Disease in Türkiye



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Introduction

- According to the Global Burden of Disease report published in 2017, 118.1 million people worldwide have peripheral arterial disease (PAD)¹.
- Patients with PAD may present with many comorbidities, including severe limb ischemia, amputation, myocardial infarction (MI), and stroke².
- Comorbid diseases affect many clinical outcomes, including mortality, functional capacity, quality of life, and treatment cost of a disease³.
- This study aims to calculate the treatment costs for comorbid diseases in patients with PAD in Türkiye.

Initial Treatment Cost

	Myocardial Infarction	Stroke	Major Amputation	Minor Amputation
Laboratory Cost	1,021 TL	1,506 TL	683 TL	831 TL
Hospitalization Cost	1,589 TL	4,139 TL	4,518 TL	883 TL
Non-Medicine Treatment Cost	750 TL	533 TL	795 TL	1,359 TL
Medicine Cost	2,625 TL	977 TL	958 TL	958 TL
Total Cost	5,984 TL	7,156 TL	6,954 TL	4,031 TL

Follow-Up Treatment Cost

	Myocardial Infarction	Stroke	Major Amputation	Minor Amputation
Laboratory Cost	536 TL	80 TL	76 TL	76 TL
Hospitalization Cost	91 TL	170 TL	399 TL	134 TL
Non-Medicine Treatment Cost	871 TL	1,068 TL	945 TL	945 TL
Medicine Cost	283 TL	715 TL	1,859 TL	1,652 TL
Total Cost	1,780 TL	2,033 TL	3,279 TL	2,807 TL

Treatment Cost

	Deep Vein Thrombosis	Pulmonary Embolism	Systemic Embolism	Percutaneous Revascularization
Laboratory Cost	66 TL	500 TL	514 TL	840 TL
Hospitalization Cost	262 TL	1,440 TL	2,754 TL	1,396 TL
Non-Medicine Treatment Cost	23 TL	135 TL	1,360 TL	1,281 TL
Medicine Cost	327 TL	1,448 TL	1,060 TL	47 TL
Total Cost	678 TL	3,523 TL	5,689 TL	3,564 TL

Methods

- The clinical data required to calculate the treatment costs of comorbid diseases accompanying PAD were collected from expert opinions and a literature review, and the costs of medicines and procedures were obtained from the Turkish Social Security Institution Health Practice Communiqué.
- The analyses were conducted using Microsoft Office Excel based on the perspective of reimbursement agency.

Results

- For patients with comorbid MI and PAD, the initial treatment cost was calculated as 5,984 TL, and the 12-month follow-up treatment cost was 1,780 TL.
- For patients with a stroke in addition to PAD, the initial treatment cost was calculated as 7,156 TL, and the 12-month follow-up treatment cost was 2,033 TL.
- The cost of emergency treatment for major amputation in PAD patients was calculated as 6,954 TL, and the cost of 12-month follow-up treatment was 3,279 TL.
- For minor amputations, the cost of emergency treatment was calculated as 4,031 TL, and the cost of 12-month follow-up treatment was 2,807 TL.
- For other comorbidities in PAD patients, the treatment cost of deep vein thrombosis was calculated as 678 TL, the treatment cost of pulmonary embolism was 3,523 TL, the treatment cost of systemic embolism was 5,689 TL, and the treatment cost of percutaneous revascularization was 3,564 TL.

Conclusions

- The primary economic burden related to the treatment costs of comorbidities in PAD patients in Türkiye is due to interventional or surgical treatments.
- Improved treatment for PAD will also reduce the economic burden related to other comorbidities.
- It is important for Türkiye to calculate the total cost of comorbidities seen in PAD patients according to the total number of patients and to determine the economic burden it creates in the health system.
- Therefore, more studies and especially real-world analyzes are needed to understand the total share in the national health budget.

References

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