Original Article

Effect of conservative management on intermittent claudication in patients with below knee peripheral arterial disease

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Abstract:

Background: The management of patients with below knee peripheral arterial disease (PAD) has changed dramatically over the last ten years. An improvement of intermittent claudication and quality of health can be achieved using a combination of statins, platelet aggregation inhibitors and the new inhibitor of cyclic AMP (adenosine monophosphate) Cilostazol. Medical therapy may be effective in as few as 30% of patients because of noncompliance and drug intolerance. This study evaluated the effect of conservative management on intermittent claudication in patients with below knee peripheral arterial disease.

Method: This Observational study was conducted among 47 patients with below knee peripheral arterial disease at OPD in the Department of Vascular Surgery, Bangladesh Medical University (BMU) from September 2021 to August 2022 by giving conservative management including lifestyle modification, exercise therapy and certain medications. Follow up was done 30 days later.

Results: This study observed maximum 53.2% respondents belonged to 51-60-year age group and 23.4% respondents belonged to >60 years, mean ± SD was 55.68 ± 4.57 years. 77% respondents were male and 23% were female with 80.9% had history of smoking and 95.7% had comorbidities. Majority respondents had claudication 70.2% and ulceration (80.9%) with (83%) walking distance was <200m. Ankle Brachial index (ABI) in right lower limb in majority respondents (48.9%) belonged to 0.8-0.9 group and in left lower limb (34%) belonged to 0.8-0.9 and 0.9-1 group. Follow up after 30days showed 68.1% respondents had improved walking distance and 70.2% had reduced claudication. After treatment, ABI in right lower limb in majority respondents (44.7%) belonged to 0.8-0.9 group and in left lower limb 36.2% belonged to 0.9-1 group. This study observed that majority of the respondents have improved walking distance >200m (p=?0.001).

Conclusion: Early outcome of conservative treatment in below knee peripheral arterial disease improves patients walking distance but satisfactory hemodynamic improvement was not seen. Primarily conservative therapy can be given as initial treatment option for most of the claudicants.

Key Words: Peripheral arterial disease, Intermittent claudication, Conservative management.

Introduction

Peripheral arterial disease (PAD), defined as chronic atherosclerotic occlusive disease of the lower extremities, is a major and growing health problem, estimated to affect more than 200 million individuals around the globe. The risk of Peripheral arterial disease increases two- to three-fold for every 10-year increase in age after 40 years. More recently, Intermittent claudication was reported to be more common in men. Aging of the world's population, along with diabetes, smoking, dyslipidaemia, and hypertension are the critical risk factors [1].

The disease results from Interference In blood circulation due to gradual formation of atherosclerotic plaque leading to arterial stenosis. The severity of its symptoms depends on the degree of stenosis and occlusion of peripheral blood vessels,

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