

## Practical Home Exercise Program for Patients with **Peripheral Arterial Disease**

**THE MAJORITY OF PAD PATIENTS WHO EXERCISE DAILY AND STOP SMOKING WILL EXPERIENCE SYMPTOMATIC RELIEF AND MAY BE ABLE TO AVOID OR DELAY UNDERGOING AN INVASIVE PROCEDURE TO TREAT PAD**

Total rest/exercise period should be **45-60 minutes, every day, 7 days per week.**

### Treadmill Exercise Program:



1. Begin at 2mph and a grade of 0 (on a flat surface) using the side rails only for balance.
2. Evaluate claudication discomfort based on the scale.
3. Stop the treadmill when pain is 3-4 on the scale.
4. Resume exercise at the same intensity when pain stops.
5. Repeat rest/exercise cycles.
6. Increase speed by 0.2mph each time you can walk for 8 minutes without pain.
  - Once you are able to walk at 3.4mph, or reach a speed at which you can no longer keep up, begin increasing the grade by 1%.

OR

### Brisk Walking Program:

1. Begin walking outdoors at a speed that elicits tolerable claudication pain within 3-5 minutes.
2. Evaluate claudication discomfort based on the scale.
3. Stop walking once your pain reaches 3-4 on the scale and resume only after pain goes away.
4. Repeat rest/exercise (walk) cycles with sessions approximately 10-20 minutes.
5. Gradually increase session time by 5 minutes until you achieve a goal of **45-60 minutes** of intermittent walking.



**CLAUDICATION PAIN / DISCOMFORT SCALE** 1 = no pain/discomfort 2 = onset of claudication 3 = mild 4 = moderate 5 = severe

***Tips for success:*** When at 3-4 on pain/discomfort scale, stop walking completely and stand still until the discomfort is gone. The pain/discomfort should go away in 2-5 minutes. If you walk until you are in severe pain, you will build up lactic acid in your muscles, and it will take much longer for the pain to go away.

***Remember:*** Try your best! **Optimal exercise is 45-60 minutes every day.** Your exercise capacity will improve every day. Most patients show symptomatic improvement with a 3 months trial. Not only will this improve your walking performance, decrease your discomfort, and improve your quality of life, this type of program is also beneficial for your heart, blood pressure, and lipid (cholesterol and triglyceride) levels. Again, quitting smoking will help improve your symptoms.

Olin JW, White CJ, Armstrong EJ, Kadian-Dodov D, Hiatt WR. Peripheral Artery Disease – Evolving Role of Exercise, Medical Therapy, and Endovascular Options. J Am Coll Cardiol 2016; 67:1338-57.

Suzuki H, Iso Y. Exercise Therapy for Intermittent Claudication in Peripheral Artery Disease. e-journal of the ESC Council for Cardiology Practice 2015; 16(34). Retrieved from <https://www.escardio.org/Guidelines-&-Education/Journals-and-publications/ESC-journals-family/E-journal-of-Cardiology-Practice/Volume-13/exercise-therapy-for-intermittent-claudication-in-peripheral-artery-disease>

## 提供在家中進行的實用保健運動計劃給週邊動脈患者

**週邊動脈疾病患者，如果每日常運動和戒煙將會察覺症狀減輕，也許避免和延遲週邊動脈的手術**

每天總共休息和運動時間應 45 到 60 分鐘，每週 7 天。

### 跑步機運動計劃：



1. 首先使用每小時 2 英里的速度和平坦地面（可使用側護欄為平衡）。
2. 利用行走困難程度級別表估計自己的行走困難程度。
3. 如果感覺困難程度是 3-4 級，你應立即停止跑步機。
4. 當疼痛停止，恢復運動，採用相同運動的強度。
5. 重複休息和運動的程序。
6. 如果你每次能不停止走 8 分鐘，每次增加 0.2 英里的速度。
  - 如你能夠不停以每小時 3.4 英里行走，或達到自己的最高速度，你可以多提高跑步機速度的百分之一。

或者

### 健步快走療程：

1. 在戶外行走，開始用腳可以承受的疼痛速度行走 3-5 分鐘。
2. 利用行走困難程度級別表估計自己的行走困難程度。
3. 如果感覺困難程度達到 3-4 級，你應立即停止步行，當疼痛消失後才繼續行走。
4. 重複健行/休息約 10-20 分鐘。
5. 逐漸增加健步時間，每次增加 5 分鐘，直至你可健行達到 45-60 分鐘。



**疼痛/困難程度級別表**    1= 無痛，無不適    2= 稍感疼痛    3= 輕度疼痛    4= 中度疼痛    5= 嚴重疼痛

**成功的秘訣：**當疼痛或不適程度達到 3-4 級，應完全停止行走，站在跑步機上約 2-5 分鐘，直到疼痛或不舒適感消失。如果不休息而繼續運動，你的疼痛會加深，肌肉會積聚酸性，這會令肌肉需要更長的時間恢復。

**緊記住：**盡你所能！最佳的運動是每天 45-60 分鐘。如你日常的練習，你的運動能力會改善，大多數患者在 3 個月嘗試保健運動他們覺得症狀改善。這不僅會提高你的步行能力，減少你腿的不適，並提高您的生活品質，這類型的保健運動對你的心臟和血壓有幫助，也有可能調正你的血脂（膽固醇和甘油三酯）的水平。此外，戒煙將有助於改善你的症狀。

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