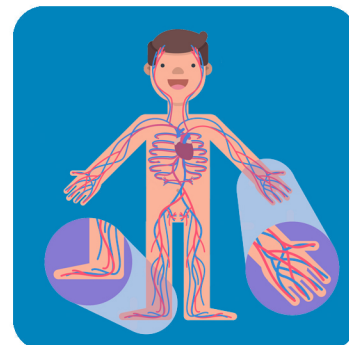




Exercise and Peripheral Artery Disease (PAD)

Peripheral arterial occlusive disease, also called peripheral artery disease (PAD), is a common circulatory problem in which narrowed arteries restrict blood flow usually to the lower limbs. As the leg don't receive enough blood to keep up with demand this will lead to, most notably, leg pain when walking (claudication). Peripheral artery disease is also likely to be a sign of a more widespread accumulation of fatty deposits in your arteries (atherosclerosis).



In Hong Kong



PAD is recognized as a worldwide prevalent problem among the elderly (aged 75 or older), with about 20 - 30% suffering from this disease. Among Hong Kong elderly people, PAD is also a very common condition with a prevalence of 21%.

Why Can Exercise Help?



High levels of physical activity have shown to reduce around 60% of mortality rate when compared to their inactive counterparts. Benefits of exercise include: increase blood flow to the legs (favourable redistribution of blood); reduced blood viscosity; improved endurance; improved walking efficiency; increased daily energy expenditure.

Exercise Recommendations

Aerobic Exercise



Stay active on 3 - 5 days per week



Accumulated 30 minutes or more of exercise per day, aiming to reach intense pain before starting the rest period



Weight bearing exercise using large muscle groups.



Resistance Training

Exercise at least two times per week



Exercises at light -moderate intensity or below pain threshold



1-2 sets of exercise for all major muscle groups (upper and lower limbs)



Body weight exercises, resistance machines or free weight exercises

A combination of aerobic and resistance training leads to the BEST health outcomes

Tips for Getting Started

- The best form of exercise is highly individualized while most PAD patients should engage in interval walking, Nordic pole striding, or stair climbing.
- Allow complete recovery (pain subsided) between walking intervals.
- 5-10 minutes of non-weight bearing warm up and cool down should also be adhered.

References

- 1) Hirsch AT, Haskal ZJ, Hertzler NR, et al. ACC/AHA 2005 guidelines for the management of patients with peripheral arterial disease. Circulation. 2006;113(11):e463-654. American Heart Association. www.americanheart.org
- 2) Lai, Tin Lok & Ang, Ks & Hu, Hl & Heng, C & Le, K & Lai, K. (2018). Peripheral arterial disease in Hong Kong Chinese elderly.
- 3) National Heart, Lung, and Blood Institute. www.nhlbi.nih.gov
- 4) Peripheral Arterial Disease Coalition. www.padcoalition.org/wp