



Exercise and Health Series 運動與健康系列

Exercise and Frailty

Frailty is a common clinical syndrome in older adults that carries an increased risk for poor health outcomes including falls, incident disability, hospitalization, and mortality. This is due to the individual's decline in reserve and function across multiple physiological systems, resulting in the person's inability to withstand environmental stressors. Frailty is often assumed to be an inevitable consequence of aging, but in recent years, increased physical activity or regular exercise training has been shown to be a good preventive strategy for frailty.



In Hong Kong



According to an HKU survey of 1,892 community-dwelling older persons aged 65 years or above, 40% of older persons are pre-frail and over 10% frail, suggesting it as a very common problem among Hong Kong elderly.

Why Can Exercise Help?



Regular physical activity can help significantly to reduce the number of risk factors and improves function and health through increased balance confidence, improved muscular strength balance, increased walking speed and improved mental ability and mood. Furthermore, structured exercise training has a positive impact on frail older adults.

Exercise Recommendations

Aerobic Exercise







Be active on most days of the week and at least two to three days per week.



Accumulated ≥30 -45 minutes of exercise at a fairly light to moderate level.



Walking or aerobic chair exercise and maintain the exercise habit for more than 5 months.





Do resistance training two or three times per week.



Exercise at a moderate level.



Target to finish 1-2 Sets of 10-15 Reps for each exercise, accumulating ≥30-45 minutes.



Begin with light resistance, targeting major muscle groups, maintain for at least 5 months.

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

Tips for Getting Started

- Avoid exercise if you have an active infection, extreme fatigue or just after surgery. Talk with your health care
 provider and exercise specialist in advance if you have any concerns.
- Whilst exercising, switch between seated and standing exercises to avoid long periods of standing.
- Make sure the venue is safe for exercise and a safety handrail is provided for supporting the older adult when needed.

References

- 1) Fried et al., 2001;56 J Gerontol A Biol Sci Med Sci (3):M146-56
- 2) Theou O, et al. The effectiveness of exercise interventions for the management of frailty: A systematic review. Journal of Aging Research 2011. doi.: 10.4061/2011/569194
- 3) Xue, Q. L. (2011). The frailty syndrome: definition and natural history. Clinics in geriatric medicine, 27(1), 1-15
- 4) Woo, J., Yu, R., Wong, M., Yeung, F., Wong, M., & Lum, C. (2015). Frailty screening in the community using the FRAIL scale. Journal of the American Medical Directors Association, 16(5), 412-419.





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運動與虛弱症狀

虚弱(衰老)是指身體機能退化的一種臨床症狀,虚弱的長者由於生理系統功能和健康儲備下降,導致無法承受環境帶來刺激,因而增加跌倒、殘障、住院和死亡的風險。虚弱並非衰老過程的必然結果,研究顯示增加活動量和恆常運動是預防虚弱的有效方法。



本地情況



長者虛弱的情況在香港十分普遍,香港大學對 1892名65歲或以上的年長人士進行調查,發現 40%居住在社區的長者屬體弱前期,超過10%介 定為體弱。

運動怎麼可改善?



系統性的體能訓練能有效地改善長者體弱問題,恆 常運動習慣有助減少虛弱危險因素,並強化身體功 能和維持健康,包括增強肌力和平衡力以預防跌倒 、提高步行速度、紓緩情緒等。

運動建議

有氧運動



每週運動次數:每天盡量保持活躍,建議每 周最少2-3次。



運動時間: 每天累積最少30至45分鐘低至中 強度運動。



運動模式:步行或椅上有氧運動,並持續至 少5個月以建立運動習慣。

阻力訓練



每週運動次數: 每周2-3次。



運動強度: 中強度。



每次運動時間: 每次1-2組, 每組10-15次。



運動模式: 從低阻力開始,針對主要肌肉群。

開始時注意事項

- 如遇到感染、極度疲勞或手術後應避免運動。如有任何疑問,請諮詢醫護人員和運動專家的意見。
- 以免長時間站立,訓練時可交替進行椅上和站立運動。
- 確保場地安全,提供安全扶手預防長者失平衡跌倒。

參考資料

- 1) Fried et al., 2001;56 J Gerontol A Biol Sci Med Sci (3):M146-56
- 2) Theou O, et al. The effectiveness of exercise interventions for the management of frailty: A systematic review. Journal of Aging Research 2011. doi.: 10.4061/2011/569194
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