

## Exercise Prescriptions in Older Adults

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### CASE PRESENTATION

A 67-year-old M with stage two Hypertension, his home BP readings are persistently >140/>90. He is on amlodipine and irbesartan. He is looking for options to improve his blood pressure but hopes he can avoid adding another medication to his current regimen.

What is the most appropriate initial intervention to achieve his blood pressure goal?

- Medication review and initiation of torsemide
- Initiate an exercise program in an effort to better control his BP
- Change irbesartan to a combination pill (HCTZ+ARB)
- Referral to Cardiology



Exercise prescription can be described using the FITT-VP principle, including the following components (3):

- F – Frequency (how often the exercise is performed)
- I – Intensity (how hard the exercise is)
- T – Time (how long or the duration of the exercise)
- T – Type (the mode or kind of exercise)
- V – Volume (the total volume or amount of exercise)
- P – Progression (advancement of the exercise program)

Note that the concept of “pattern” also has been used to reflect the overall arrangement of the exercise (e.g., exercise performed in a continuous session or in multiple 10-minute bouts throughout the day) (8).

FOR \_\_\_\_\_ DATE \_\_\_\_\_  
 ADDRESS \_\_\_\_\_ REFILL \_\_\_\_\_ TIMES \_\_\_\_\_  
**R<sub>x</sub>**  
 • 30 min/day of moderate intensity aerobic 5days/week  
 • Total 150min/week  
 • Supplement with resistance, flexibility and balance training >2days/week  
 \_\_\_\_\_  
 DISPENSE AS WRITTEN      PRODUCT SELECTION PERMITTED  
 DEANO. \_\_\_\_\_ ADDRESS \_\_\_\_\_  
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Older adults should engage in a combination of aerobic, resistance, flexibility and balance training to promote and maintain health. In patients with Hypertension, an emphasis should be placed on aerobic activity because it has been shown to reduce resting BP by 5-7mmHg.

# Pre-participation Health Screening – Is it safe to start an exercise program?

- Clinicians should prescribe exercise in a systemic and individualized manner, referring back to FITT-VP
- Pre-participation health screening should be implemented to identify at risk individuals, e.g., shortness of breath at rest or with mild exertion, chest pain, palpitations, dizziness or syncope, orthopnea, ankle edema, tachycardia, intermittent claudication, murmurs, unusual fatigue
- Components of the FITT-VP should:
  1. be modified in the setting of certain common chronic conditions like HTN, DM2, COPD, HLD, Arthritis
  2. include a thorough review of the medication list
    - \* Awareness of potential additive or deleterious interactions between exercise and medications
    - \* Monitor if and when deprescribing should take place

## Assess for Barriers and Motivation

- ◆ Approximately 87% of older adults have at least one barrier to exercise participation
- ◆ Low self-efficacy, fear of injury, lack of social support, social isolation, pain being the most commonly reported barrier
- ◆ Consider Group based exercise - has been shown to be more effective for long-term adherence than home-based individual exercise programs
- ◆ Work with your healthcare team, nursing, care coordinator, social work

## Changing Practice

- Record physical activity as a vital sign
- Prescribe exercise as one might prescribe a medication
- Screen for depression, isolation and lack of social support
- Assessment and adequate treatment of underlying pain syndromes
- Office demonstrations and handouts for patients
- Referral to physical therapy, chiropractor or acupuncturist if applicable



## Patient Resources

- The Otago Exercise Program (OEP)
- Geriatric Focused Physical Therapy
- GEROFIT for Veterans

## 4 types of exercise



Case Presentation  
Answer: B

## References

1. Bushman, Barbara A. Ph.D., FACSM Determining the I (Intensity) for a FITT-VP Aerobic Exercise Prescription, ACSM's Health & Fitness Journal: May/June 2014 - Volume 18 - Issue 3 - p 4-7. doi: 10.1249/FIT.0000000000000030
2. Zaleski, A. et al "COMING OF AGE: CONSIDERATIONS IN THE PRESCRIPTION OF EXERCISE FOR OLDER ADULTS". Hartford Hospital, Hartford, Connecticut; University of Connecticut, Storrs, Connecticut; University of Connecticut School of Medicine, Farmington, Connecticut. Houston Methodist DeBakey Journal, 2016.