Exercise Issues in the Postmenopausal Female

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Objectives
- Review exercise recommendations and benefits for a postmenopausal female
- Review spine safe and osteoporosis specific exercises
- Review exercise effect on menopause symptoms

A Case
- Mary
  - 65 year old female
  - Active and recently retired
  - Exercise
    - 3 times/week
    - Spinning and sit-ups now
    - Wants to try yoga
  - Medical conditions:
    - Osteoporosis
    - Mild knee osteoarthritis

What are our goals for exercise?
- Fitness
- Energy
- Improved mood
- Strengthen bones
- Fall prevention
- Treat chronic disease
- Stay functional
Benefits of Exercise
- Improve physical function and quality of life
- Slow sarcopenia
- Decrease cognitive decline
- Reduce risk of diabetes, heart disease
- Lower mortality
- Decrease falls and improve bones

6 Workout Mistakes Women Make When They Hit Menopause
- Do only cardio
- Prefer to swim or cycle
- Take it too easy
- Continue with their same diet
- Do not warm up
- Don’t ask for help

Too Fit To Fracture Recommendations
- For preventing bone loss and falls, recommend a combination of:
  - Strength training for major muscle groups ≥ 2x/week
  - Balance challenges daily
  - Moderate-to-vigorous aerobic physical activity ≥ 150 min/week, or 30-30 min per day

- To reduce spine loads, recommend:
  - Exercises for back extensor muscles daily
  - Spine sparing strategies – hip hinge for bending, step-to-turn instead of twisting, holding loads close to body

Osteoporosis
Bone disease marked by reduced bone strength leading to an increased risk of fractures.

Bone Strength = Bone Mass(density) + Bone Quality

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Impact of Osteoporosis and Fractures

50% of osteoporosis-related repeat fractures can be prevented with appropriate treatments.

Over 1/3 of patients with a hip fracture had a prior fracture.

What types?
- Weight bearing is best
- Bone density in cycling and swimming similar to sedentary
- Fun and sustainable
- Spine safe

Importance of Spine Fractures
- Most common osteoporotic fractures
- 75% are not clinically evident
- Patients with a spine fracture have a 5-fold future risk of a spine fracture and 2-fold risk of a hip fracture
- 9% decrease in lung capacity per vertebral fracture

Safe Movement for Spinal Protection

Slide by permission from the National Bone Health Alliance.
Spinal Extension Exercises

Spine Safe Yoga and Pilates

- Needs to be spine safe!
- Watch flexion poses and exercises
- Sarah Meeks
- S.A.F.E. Yoga for Skeletal Health
- Spine safe yoga instructor course
Specific Protocol
- Kemmler et al. describe program to keep bones healthy
- Warm-up
- Jumping (walking if already osteoporotic)
- Circuit-based strength training
- Flexibility


Does exercise help with Hot Flashes?
- Maybe?
- Controlled study shows slight benefit in 2016
  - Small pilot – 21 women
  - 48 fewer episodes/wk in the exercise group
  - Less severe when they occur
- Cochrane review - 5 randomized studies show no benefit

What do we tell Mary?

Mary
- 65 year old female
- Active and recently retired
- Exercise
  - 3 times/week
  - Spinning and sit-ups now
  - Wants to try yoga
- Medical conditions:
  - Osteoporosis
  - Hand osteoarthritis
What do we tell Mary?

- Congratulate her!
- 150 minutes per week
- Resistance training
- Start walking again
- Stop doing sit-ups!
- Find a “safe spine” yoga class

References

- http://www.cochrane.org/CD006108/MENSTR_exercise-for-vasomotor-menopausal-symptoms