

Session Title: Quit Fibbin': PT Management of Atrial Fibrillation

Session Description

Atrial fibrillation (AF) is the most common sustained cardiac arrhythmia, associated with reduced exercise tolerance, increased risk of stroke, and diminished quality of life. Physical therapists are uniquely positioned to support patients with AF by integrating safe, evidence-based exercise and education into comprehensive management plans. This session will begin with an overview of the pathophysiology and risk factors contributing to AF, followed by a review of current medical and pharmacologic management strategies. Results from a scoping review of the literature on exercise benefits in AF will be presented, highlighting evidence for improvements in functional capacity, symptom burden, and long-term health outcomes. Building on this foundation, practical physical therapy interventions will be explored through case study applications. Emphasis will be placed on exercise prescription, monitoring, and patient-centered strategies to enhance safety, adherence, and overall well-being. Participants will leave with actionable treatment recommendations to apply directly in clinical practice.

Teaching Method

Lecture

Discussion

Objectives

1. Explain the pathophysiology, risk factors, and common medical and pharmacological treatments for atrial fibrillation.
2. Summarize findings from a scoping review on the benefits of exercise for individuals with atrial fibrillation.
3. Develop an evidence-based physical therapy treatment plan for a patient with atrial fibrillation, including exercise prescription and monitoring strategies.
4. Apply case-based problem-solving to identify safe and effective interventions tailored to patients with atrial fibrillation.

What will be the clinician/educator takeaways/skills that can be utilized immediately?

1. Risk Factor Recognition:
 - Quickly identify patient characteristics and comorbidities that increase AF risk (e.g., hypertension, obesity, sleep apnea, inactivity).
 - Integrate screening questions into your intake to flag patients at higher risk.
2. Safe Exercise Prescription:
 - Apply FITT (Frequency, Intensity, Time, Type) principles tailored for AF.
 - Adjust workloads based on heart rate response, medication use (e.g., beta-blockers), and symptom monitoring.
 - Implement evidence-based exercise intensities (moderate continuous vs. interval training) shown to improve outcomes.
3. Monitoring Skills:
 - Use simple tools (Borg RPE, HR, rhythm awareness, blood pressure) to safely progress patients.
 - Recognize red-flag signs of poor tolerance (dizziness, chest pain, new arrhythmias).
4. Medication Awareness in PT Practice:
 - Understand how beta-blockers, anticoagulants, and antiarrhythmics influence exercise response and safety considerations.
 - Adjust PT strategies around medication timing (e.g., peak effect of beta-blockers, bleeding risk with anticoagulants).
5. Case-Based Problem Solving:
 - Translate knowledge into action through real-world patient scenarios.
 - Adapt interventions when patients present with multiple comorbidities (heart failure, diabetes, obesity).
6. Patient Education Skills:
 - Deliver clear guidance on the role of exercise in AF management.
 - Teach patients to self-monitor symptoms and safely pace activity.
 - Reinforce adherence to both medical management and exercise programs.

Recommended Content Level

Advanced

References:

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2. Kurasawa Y, Maeda H, Tamaru T et al. Safety and effectiveness of exercise-based cardiac rehabilitation for patients with atrial fibrillation following radiofrequency catheter ablation therapy: A systematic review and meta-analysis. *Cureus.* 2023;15(12):e50476. doi:10.7759/cureus.50476
3. Vidal-Almela S, Marcal IR, Wong J et al. Sex differences in changes in cardiorespiratory fitness and additional health outcomes following exercise training in adults with atrial fibrillation: A systematic review and meta-analysis. *J Cardiopulm Rehabil Prev.* 2024;44(5):E52-E63. doi:10.1097/HCR.0000000000000891
4. AbuElkhair A, Boidin M, Buckley BJR et al. Effect of different exercise types on quality of life for patients with atrial fibrillation: A systematic review and meta-analysis. *J Cardiovasc Med.* 2023;24(2):87-95. Doi:10.2459/JCM0000000000001386
5. Ortega-Moral A, Valle-Sahagun B, Baron-Esquivias G. Efficacy of exercise in patients with atrial fibrillation: Systematic review and meta-analysis. *Med Clin.* 2022;159(8):372-379. doi:10.1016/j.medcli.2021.11.013
6. O'Keefe EL, Sturgess JE, Gupta S, Lavie CJ. Prevention and treatment of atrial fibrillation via risk factor modification. *Am J Cardiol.* 2021;160:46-52. doi:10.1016/j.amjcard.2021.08042
7. Leggio M, Fusco A, Coraci D et al. Exercise training and atrial fibrillation: A systematic review and literature analysis. *Eur Rev Med Pharmacol Sci.* 2021;25(16):51635175. doi:10.26355/eurrev_202108_26530

Speaker Bio:

Morgan Johanson, PT, MSPT, DHS(c), CCS, is a board-certified Cardiovascular and Pulmonary Clinical Specialist, educator, and national presenter with over 23 years of experience in acute care, outpatient, SNF, and academic settings. She currently serves as Instructor in the Interprofessional Education Department and Doctor of Physical Therapy Program at St. Catherine University, where she teaches cardiopulmonary content, interprofessional courses, and serves as course co-coordinator.

Ms. Johanson is actively pursuing her Doctor of Health Science (DHSc) in Healthcare Education at Nova Southeastern University, with anticipated graduation in December 2025. Her scholarship focuses on advancing cardiopulmonary physical therapy education and updating national clinical practice guidelines. She has co-authored peer-reviewed publications, including the updated Cardiovascular and Pulmonary Entry-Level Physical Therapist Competencies, and contributed chapters to Essentials of Cardiovascular and Pulmonary Physical Therapy.

In addition to her academic work, Johanson is President of Good Heart Education, where she develops and teaches continuing education courses for physical therapists nationwide and mentors PTs preparing for the CCS Exam. She has served in multiple leadership roles with the Academy of Cardiovascular and Pulmonary Physical Therapy, including Professional Development Chair and currently as Vice President.

Clinically, she has worked in ICU, skilled nursing, and outpatient rehabilitation, with expertise in advanced cardiopulmonary care, adult CF, heart transplant, post-operative rehabilitation, and management of medically complex patients. She has also served as faculty in multiple residency and academic programs across the country.

Johanson is committed to combining teaching, clinical expertise, and professional leadership to advance evidence-based cardiovascular and pulmonary rehabilitation and to mentor the next generation of physical therapists.

