Exercise and AF

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Declaration of interests

- Member of the Medical Advisory group for AFA
- Member of Arrhythmia Alliance Executive Committee
- Member of All Party Parliamentary Group on AF
- Member of All Party Parliamentary group on Arrhythmias
- Member of BHRS Exam Committee
Introduction

- Atrial fibrillation overview
- Conditions associated with AF
- AF and exercise
- Inactivity and athletes - 2 ends of the spectrum
- Considerations before exercise
- Top tips for exercise
- Warning signs
- Summary
Atrial fibrillation

- In 2010 32.5 million people worldwide have AF
- 1 in 4 middle-aged adults in Europe and US will develop AF
- AF is associated with stroke, heart failure, hospital admissions and reduced quality of life
- 1% of NHS budget goes to AF care
- Increasing numbers are expected
  - Ageing population & better detection

ESC (2016)
Common conditions associated with AF

- Coronary artery disease
- Valvular heart disease
- Heart failure
- Hypertension
- Thyroid dysfunction
- Diabetes mellitus
- Obesity (BMI>31 kg/m²)
- Athletic hearts
Let's talk about exercise
How does exercise influence AF?

Factors that may contribute to mortality associated with “excessive” endurance exercise include myocardial fibrosis and ventricular arrhythmias.

ESC (2013)
Why is exercise important in AF?

- Lack of physical activity & obesity are related
  - In obesity there is fatty infiltration & inflammation of the atria
- Lack of physical activity is associated with increased risk of AF
- Exercise improves cardiovascular health
- It lowers AF burden
- ARREST & LEGACY trial data is positive in favour of exercise in AF
Athletes and AF

- Intensive exercise increases the risk of AF
- There is a 5 fold increase in the risk of AF in athletes compared to normal controls
- Due subtle changes within the atria and autonomic nervous system
Recommendations for physical activity in patients with AF

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<th>Recommendations</th>
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<td>Moderate regular physical activity is recommended to prevent AF, while athletes should be counselled that long-lasting intense sports participation can promote AF</td>
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<td>AF ablation should be considered to prevent recurrent AF in athletes</td>
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<td>The ventricular rate while exercising with AF should be evaluated in every athlete by symptoms and/or by monitoring and titrated rate control should be instituted</td>
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<td>After ingestion of pill-in-the-pocket Flecainide or Propafenone, patients should refrain from sports as long as AF persists and until 2 half-lives of the drug have elapsed</td>
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Things to consider before exercise

- Check with your Arrhythmia Nurse, Cardiologist or GP that exercise is ok
- Check that your heart rate is adequately controlled with medications, as required
- If you are taking anticoagulation, discuss the type of exercise with your healthcare professional
Which exercise should I do?
Top tips for increasing activity levels

- Everyday activities – last for 10 minutes
  - Walk more each day
  - Park the car a longer distance away
  - Use stairs instead of the lift
  - Do normal daily activities faster and for longer eg. dog walking

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Physical activity sessions

- Start gradually (10 mins)
- Regular structured exercise sessions
- Brisk walking
- Increase slowly-duration, frequency, intensity
- Consider age, level of fitness and past experience
- Setting goals
- Vary the activity
- Set reminders
- Warm up and cool down

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When to stop exercising

- Chest pain
- Awareness of rapid heart rate
- Severe breathlessness
- Fainting
- Generally feeling unwell
- For a week after catheter ablation
- Following 2 days after cardioversion
Summary

- AF treatments must include lifestyle modifications
- Exercise can be difficult when symptomatic in AF, but is massively beneficial in the long run
- Start gradually and increase the level of physical activity
- Seek support and advice
- Listen to your body
Exercise is good!

“MAKE PROGRESS NOT EXCUSES.”

Just believe in yourself.
Even if you don’t pretend that you do and, at some point, you will.
- Venus Williams

If you focus on results, you will never change.
If you focus on change, you will get results.
- Jack Dixon

IT NEVER GETS EASIER YOU JUST GET BETTER

Wake up with determination. Go to bed with satisfaction.

“SWEAT, SMILE AND REPEAT.”
Any questions?