Exercise and Atrial Fibrillation
What is Atrial Fibrillation?

AFib Feels Like...

...Drums
Pounding
In my chest.

...Thunder
Rumbling
In my chest.

...Fish
Flopping
In my chest.
What is Atrial Fibrillation?

- Normally the heart contracts & relaxes to a regular beat
- In A-Fib, the heart’s two small upper chambers (atria) beat irregularly & too fast, quivering like a bowl of gelatin
- A-Fib is the most common arrhythmia & affects more than 2.7 million Americans
Atrial Fibrillation
Exercise & Atrial Fibrillation

- A-Fib can reduce the pumping ability of your heart
- During exercise, the body needs more blood to be efficiently delivered
- If the heart is less efficient, you may notice that you fatigue more easily
Exercise & Atrial Fibrillation

- A-Fib decreases exercise capacity by as much as 20%
- For people with A-Fib, the thought of exercising with an irregular heart rhythm can be frightening
- It is generally O.K. to exercise with A-Fib
Exercise & Atrial Fibrillation

- Talk to your Doctor (Cardiologist) before starting an exercise program / Ask about specific restrictions with exercise

- Exercising with A-Fib is safe when the condition is managed medically so that the rhythm & heart rate are well-controlled
Exercise & Atrial Fibrillation

- Exercise has been proven to be a valuable form of medicine for treating many diseases, including heart conditions linked to A-Fib

- Moderate exercise is good for most people and helps to decrease overall risk of heart disease
Exercise & Atrial Fibrillation

People who engage in regular exercise

- Fewer problems with A-Fib
- Better manage everyday activities and improved quality of life
Benefits of Exercise

- Reduce risk of heart disease and stroke
- Lower blood pressure
- Improve diabetes
- Improve mental health
- Improve heart function
- Improve energy levels
- Improve cholesterol and blood fats
- Improve sleep
- Increase muscle tone
- Enhanced self image and quality of life
Benefits of Exercise

Exercise can help with weight loss

- Obesity (BMI >30) is linked to increased blood pressure, diabetes, and heart disease
- Obesity causes inflammation & other changes within the heart which causes A-Fib to worsen
- Obesity is one of the many risk factors that can be changed
Table 1. Classification of adult underweight, overweight and obesity according to BMI.

<table>
<thead>
<tr>
<th>Classification</th>
<th>BMI</th>
<th>Risk of comorbidities</th>
</tr>
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<tbody>
<tr>
<td>Under weight</td>
<td>&lt;18.50</td>
<td>Low (but risk of other clinical problems increased)</td>
</tr>
<tr>
<td>Normal range</td>
<td>18.50 – 24.99</td>
<td>Average</td>
</tr>
<tr>
<td>Overweight:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-obese</td>
<td>≥ 25.00</td>
<td>Increased</td>
</tr>
<tr>
<td>Obese class I</td>
<td>25.00 – 29.99</td>
<td>Moderate</td>
</tr>
<tr>
<td>Obese class II</td>
<td>30.00 – 34.99</td>
<td>Severe</td>
</tr>
<tr>
<td>Obese class III</td>
<td>35.00 – 39.99</td>
<td>Very severe</td>
</tr>
<tr>
<td></td>
<td>≥ 40.00</td>
<td></td>
</tr>
</tbody>
</table>

Adapted from the WHO, 2004.
Exercise Guidelines

- American Heart Association (AHA) recommends 150 minutes of aerobic exercise a week
  - 30 min a day - 5 days a week
  - 50 min a day - 3 days a week
- AHA recommends light-moderate strength training 2 days a week
Exercise Guidelines

Examples of ways you can be more active throughout the day:

- Housework
- Gardening / Yard work
- Walking / Walking the dog
- Park further away when going to the store
- Take the stairs instead of the elevator
- Walk the golf course
Exercise Guidelines

- Wear comfortable attire to exercise in, especially supportive shoes
- Warm-up & Cool-down are essential to prevent injury
  - 5-10 min Warm-up
  - 5-10 min Cool-down (can include stretching)
Exercise Guidelines

- It is important to stay hydrated, drink plenty of fluids / Especially during warm months or exercising outdoors
- Pay attention and listen to your body / Take breaks when needed
- Set realistic goals / Short term goals can keep you on track toward long term goals
Exercise Guidelines

- Exercise at any level has a positive effect on physical well-being & mortality reduction
- Keep it simple / Make it enjoyable
Aerobic Exercise

- Uses large muscle groups
- Aerobic exercise should increase heart rate and breathing rate
- Can do shorter time blocks or interval training if unable to do the recommended time
- Increase time 1-2 minutes each week until reach time goal
Aerobic Exercise

- Walking/Treadmill
- Bicycle
- Elliptical Trainer (standing or seated)
- Rowing
- Group aerobic exercise class
- Stairmaster
- NuStep
- Swimming
- Water Aerobics
Strength Training

- Strength training builds muscle which, in turn, burns fat.
- It also can help your muscles & joints stay healthy for a long, physically active life.
- As we get older we lose muscle mass.
- Strength training can off set this muscle loss.
Strength Training

- Start with a light amount of weight & then increase slowly
- Repetitions should be between 8-15
- Can start with 1 set & build up to 2-3 sets
- When lifting weights do not hold your breath / It increases your heart rate and blood pressure
Strength Training

- Lift weights using these major muscle groups:
  - Legs
  - Arms
  - Back
  - Chest
  - Shoulders
  - Abdomen / Stomach
Precautions

- Medications are an important part of your exercise routine.
- Medications keep your heart rate from going up too high.
- You can still reap the benefits of exercise, even if your heart rate is lower.
- Try to exercise after you have taken your medications.
Precautions

- Strenuous exercise should be avoided for people with A-Fib / Moderate exercise is better
- Heart rate can be irregular, so checking it isn’t an accurate method of gauging your exercise intensity
- You can use a perceived exertion scale
The Borg RPE scale is a useful alternative exertion monitoring method.

Try to maintain a rating of 11-14 during exercise.

If rating is below 11 and you don’t have any symptoms, you can push yourself a little harder.

If rating is above 14, you should decrease the intensity & duration of the exercise.
Rating of Perceived Exertion (RPE)
When to Stop Exercising

- Dizzy / Lightheaded
- An exceptionally fast heart rate / Palpitations
- Chest Pain / Can radiate to arms
- Pain in jaw, between shoulder blades, upper abdomen
- Shortness of Breath
- Unusual fatigue
- Nausea / Vomiting
- Clammy skin / Cold sweat
- Any other adverse symptoms
When to Stop Exercising

- If you feel any adverse symptoms while exercising you should stop exercising
- Sit & rest for 5-10 minutes, if symptoms persist seek medical attention
Summary

- A-Fib can be a scary problem to have, but you can learn to exercise safely with the direction and support of your healthcare team.
- People with A-Fib can gain the positive outcomes that come with exercising.
Questions??