THE MYOSITIS ASSOCIATION
Exercise for those who already exercise

- Discuss different types of exercise
  - INSPIRATION
  - Swimming/walking/gym/classes etc
  - It should be fun/enjoyable

- How much exercise is needed?
  - Enough to be health-enhancing?
  - Be intensive enough to improve physical capacity
    - How to assess heart rate
  - Adapted to your symptoms

- Problem solving
- Share your own experiences

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To rate your perceived exertion after an exercise session, just register the number that you feel best represents your experience. Lower number correspond to lower exertion, while higher number describes a higher level of exertion. The anchor words are there to help, and you can always use numbers without an anchor word. For example: a 6 corresponds to an experience of exertion that is stronger than a 5, but not exerting enough to be described as a 7.

0  No exertion
0.5 Extremely week (light)
1   Very light
2   Light
3   Moderate
4   Somewhat strong
5   Strong (heavy)
6
7   Very strong
8
9
10  Extremely strong (almost maximal)

- Maximal
Frequent walking

To improve aerobic capacity you should walk or do other aerobic physical activity at least 20-30 minutes at least 2-3 days a week on an intensity of 50-70% of your maximal heart rate.

You can calculate your estimated maximal heart rate: 220-age and then you can calculate on which range of heart rate you need to be to improve aerobic capacity.

Example: I am 45 years old: 220-45=175 (my estimated maximal heart rate). Then I need to calculate my range of heart rate for exercise session: 175 x 0.5 =87.5 and 175 x 0.7 = 122.5 (my heart rate range during exercise should be: 87.5 - 122.5.

Check your heart rate manually or by using heart rate monitor.
Aerobic exercise if you have low disease activity

- Has shown even better results on muscle function and disease activity than the previously presented resistance training program
evaluated in randomized controlled trial comparing this exercise program to a non-exercising control group on a stable level of physical activity

- **Exercise program**
  - 3 times/ w, 12 weeks
  - 30 min cycling (load of 70 % of VO₂ max)
  - 20 min muscle endurance (30-40 % of 1VRM)
Intensive resistance training when:

- You have low disease activity, lower corticosteroid doses. Stable phase of disease

- This program is contraindicated if:
  - You have severe osteoporosis and have experienced fractures
  - If you have corticosteroid dose exceeding about 20 mg/day
  - If you have severe arthritis
Intensive resistance training in low-active adult PM and DM

3 sets of 10 repetitions on 10 voluntary repetition maximum (the weight you can lift 10 times but not 11, 70% of Maximal strength)

Deltoids             Quadriceps             Lat dorsi/biceps

• Improves muscle strength and endurance
• Reduces disease activity and inflammation

Gastrocnemius             Trunk/neck

Health benefits from regular physical activity

- Strong association between aerobic capacity and health! Both in healthy and in myositis

- Regular physical activity and exercise can:
  - Improve quality of life
  - Reduce risk of type II diabetes, osteoporosis and cardiovascular disease
  - Reduce high blood pressure

- Important as individuals with inflammatory rheumatic diseases are at higher risk of developing cardio-vascular disease
Types of exercise - physical activity

- Combination of aerobic and resistance endurance training
  - Aquatic training/swimming/biking/exercise class/function training/circle training/dancing/

- Specific muscle groups / balance / coordination to optimize movement
  - Gym/home exercise/balance platform etc
Everyday physical activities / social activities

Exercise to improve physical capacity

https://youtu.be/ _2vdA5SV1Po
https://youtu.be/iZYc-bSF-fc
DSCF0075
DSCF0072
Exercise guidelines for healthy - also relevant for myositis in low disease activity

<table>
<thead>
<tr>
<th>Objective for exercise</th>
<th>Duration / exercise session</th>
<th>Intensity, % of max strength</th>
<th>Intensity, % predicted max heart rate</th>
<th>Frequency/ times/week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve muscle strength</td>
<td>-</td>
<td>60-80</td>
<td>-</td>
<td>2-3</td>
</tr>
<tr>
<td>Improve muscle endurance</td>
<td>-</td>
<td>30-40</td>
<td>-</td>
<td>2-3</td>
</tr>
<tr>
<td>Improve aerobic capacity</td>
<td>30-60</td>
<td>-</td>
<td>60-85</td>
<td>3</td>
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</table>
Health-enhancing physical activity - to reduce risk of cardiovascular disease, diabetes, osteoporosis and some forms of cancer

150 minutes of physical activity on a moderate intensity / week

OR

75 minutes of physical activity on a high intensity / week

+ Strength training twice a week

For individuals > 65 years, balance training is also recommended
Problem solving

- What are barriers and facilitators for physical activity / exercise?
Take home message

- Exercise should be designed individually and adapted to disease activity and disability with regular follow-up during active disease.

- Active progressive exercise should be recommended to patients in all stages of disease - better to do something rather than nothing.

- Exercise should be able to be incorporated in your daily life.

- Regular physical activity.