Myasthenia Gravis and Therapies

By Brittany White, PT and Kathy Adam, SLP
Myasthenia Gravis

- Weakness and rapid fatigue of muscles under your voluntary control.
- Caused by a breakdown in the normal communication between nerves and muscles.
- No cure for MG treatment can help relieve signs and symptoms
Myasthenia Gravis and Exercise

- Myasthenia Gravis symptoms tend to progress over time, usually reaching their worst within a few years after the onset of the disease.
- Muscle weakness caused by MG worsens as the affected muscles are used repeatedly, therefore symptoms usually improve with rest.
“Snowflake Disease”

We are like a SNOWFLAKE, all different in our own beautiful way.

-Unknown
Variance of Symptoms

- There is a lot of variance between patients with MG
- No one exercise program is the same and treatment strategies may even vary
Factors that can worsen MG symptoms

- Fatigue
- Illness
- Stress
- Extreme heat
- Some medications
Check with your Doctor

- Before starting any exercise program it is important to check with your physician.
- This is true with any disease but particularly with MG.
- Exercise when MG is not yet stable or if patient is not medically managed can result in worsening of symptoms and increases risk of injury.
Treatment/Exercises Goals

- During an Exacerbation - Exercise is not appropriate
  - Energy Conservation
  - Safe mobility utilizing assistive devices if necessary
  - Fall Prevention - Home Modification (grab bars, decreasing fall risks-removing throw rugs)
Safety and Energy Conservation

- Use safety precautions at home.
- Use electric appliances and power tools.
Treatment/Exercises Goals

- Once MG is Stable consistent exercise will elevate your baseline functional capacity which will diminish the effect of MG exacerbation.
MG Exercise Considerations

All stable MG patients who are exercising should consider 5 items:

- The Dollar Per Day Rule
- Exercise at your best time of day
- Exercise at peak dose pyridostigmine
- Exercise large, proximal muscle groups for short periods of time building up only to moderate intensity only
- Do not exceed Moderate Intensity Exercise Levels, mild to moderate levels of exercise are the best
Moderate Exercise Intensity

- HR should not elevate greater than 30 beats per minute from resting baseline
- Patient should not cause you to become SOB at peak of exercising
- MG symptoms should not become worse during exercise (drooping of eyes)
- Patient should not still be tired 2 hours after exercise
- Patient should not have severe residual muscle soreness day(s) post exercise
Types of Exercises and Devices Utilized in MG
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Types of Exercise and Situations to Avoid
Cooling of Muscle Groups in MG

- Some research suggests that utilizing whole body cooling suits, cold packs or cool showers and baths can decrease muscle fatigue in patients with MG.
Postural Exercises

- Important to Assist with Breathing, Speaking and Swallowing
- When our posture is good many other things become “easier”
Breathing Exercises

- Pursed Lip Breathing and Abdominal Breathing Exercises have been found to be beneficial in MG
- These exercises can improve respiratory endurance as many people with MG have effected respiratory muscles
Abdominal Breathing
Pursed Lip Breathing
Having Trouble and Don’t Know Where to Begin?

- Ask your doctor for a prescription for Physical Therapy
- A Physical therapist can get you started on a program you can continue on your own
Physical Therapy

- EVALUATION AND TREATMENT
- INCLUDES:
  - STRENGTH MEASUREMENTS
  - FLEXIBILITY
  - MOBILITY ASSESSMENT
  - ASSESSMENT FOR ASSISTIVE DEVICE AS NEEDED
  - BALANCE
  - SAFETY/FALL PREVENTION
  - GAIT
  - ENDURANCE/ACTIVITY TOLERANCE
  - TRANSFERS
PT Treatment

- Exercise prescription and plan of care will be dependent on results of the evaluation

- It can include:
  - Energy Conservation
  - Gait Training with appropriate assistive device
  - Posture and Balance retraining
  - Breathing Exercises
  - Recommendations for safety within the home and community
  - Developing a specific home exercise program you can continue on your own
“A journey of a thousand miles begins with a single step”

— Confucius
Resources


5. Weeks B. Myasthenia Gravis Helping patients have better outcomes. The Nurse Practitioner. 2012; 37.9: 31-36

MYASTHENIA GRAVIS AND SPEECH THERAPY
Communication disorders and Myasthenia Gravis

- Dysphonia
- Dysarthria
- Dysphagia
DYSPHONIA

- Dysphonia is a term that refers to any change in voice quality. This may be an increase in nasality, or breathiness.
- It may be related to weakness in the soft palate
- Or breathing problems
Voice/Breathing

- Soft Palate Weakness is sometimes remedied with medication and exercise

- Breathing exercises are essential to improve voice and communication
DYSARTHRIA

- Dysarthria refers to a decrease in articulatory skills due to muscle weakness

- Speech therapy can assist in muscle strengthening and compensatory strategies to improve articulation
DYSPHAGIA

- Dysphagia refers to swallowing deficits that can be caused by muscles weakness.

- Can be oral as well as pharyngeal

- May need a diet change in consistency of food to remain well nourished and hydrated
SPEECH THERAPY

- EVALUATION
  - BREATHING FOR SPEAKING
  - VOICE QUALITY ASSESSMENT
  - EATING/SWALLOWING ASSESSMENT
  - TOLERANCE FOR ACTIVITY
**SPEECH THERAPY TREATMENT**

- Breathing for connected speech
  - Exercises to increase breath control

- Vocal exercises to improve voice quality

- Swallowing exercises and diet recommendations
- Breathing for swallowing
- Articulation exercises
Speech therapy

- Usually short term
- Check up/follow up
Thank you for having me. I appreciated being here with you.