The Use of Medical Exercise Therapy for a Post-operative Gastrocnemius Recession Patient After Multiple Conservative Physical Therapy Treatments Failed: A Case Report
C Cross, BS, DPT student
University of New England

**Background**

**Achilles Tendonitis**
- Affects 9% of all recreational runners
- Treatment is variable
- Surgery is controversial

**Gastrocnemius Recession**
- Small incision to postero-medial lower leg to release gastrocnemius tendon
- Most commonly used to treat chronic achilles tendonitis
- No known literature for the post-operative physical therapy management

**Medical Exercise Therapy (MET)**
- Developed by the Holten Institute
- 60 minutes of graded exercise
- High repetitions with low weight
- Functional weight bearing during functional movement patterns

**Purpose**
The purpose of this case report was to report the use MET for a patient after a gastrocnemius recession as treatment for chronic achilles tendonitis.

**Case Description**
- 30 year-old female who was an avid runner with chronic achilles tendonitis in her left ankle
- Pes cavus foot structure
- Underwent a gastrocnemius recession after 3 failed attempts of conservative physical therapy
- Chief complaints after surgery: pain, weakness, and instability
- Goal: run 30 minutes without pain

**Examination**

**Functional Limitations**
- Pain: 7/10
- Range of Motion: limited dorsiflexion
- Symmetry: foot structure
- Balance: verging on falling with child
- Gait: slow-paced
- Skin Integrity: normal

**Home Exercise Program**

**Eccentric calf raises**
- Instructions: rise onto toes of both feet. Slowly lower left heel down, then return to start position.
- 3x30 sets at least 3 times a day

**Standing Calf Stretch**
- Gastrocnemius and Soleus
- 3x30 seconds each

**Interventions**
- 70 minutes of physical therapy 3 times a week for 6 weeks.
- Exercises chosen to promote return to running.

**Short Term Goals**
- Regain left ankle ROM
- Improve left ankle strength to 4+/5
- Be able to walk 3 days a week for 20 minutes without report of increased pain
- LEFS score of 40/80 & PSFS score of 7/10

**Discussion**
MET was a viable intervention for a patient after a gastrocnemius recession as treatment for chronic achilles tendonitis. The patient reported satisfaction despite constant pain and slow return to activity. The slow-paced improvements may be related to the chronicity of the tendonitis, length of time she spent inactive, and her pes cavus foot structure. Future research should be conducted with a larger sample size for a longer duration.

**Outcomes**
- Improvements made in all areas
- MMT: goal met, except for plantarflexion which was 4/5
- Pain: decreased from constant 3-4/10 to constant 2-3/10
- Able to walk for 30 minutes and bike for 20 minutes without increased pain; did not trial running

**References**