

The How and When of Mobility Devices

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Initial Changes in Mobility

- Often the first sign of Myositis is having difficulty rising from a chair or climbing the stairs.
- The goal of the patient and the treatment team is to maintain ambulation as long as possible.
- We truly want to avoid WC use as long as possible.
- Use it or lose it!

Treatment of Muscle Weakness

Direct Therapeutic Interventions

- PT and OT to implement an exercise program to improve or maintain current strength.
- Individually designed programs for overall conditioning.
- Research shows that regularly following a structured exercise regime is the only tactic to minimize the effects of the disease on muscle strength.

Treatment of Muscle Weakness (Cont'd)

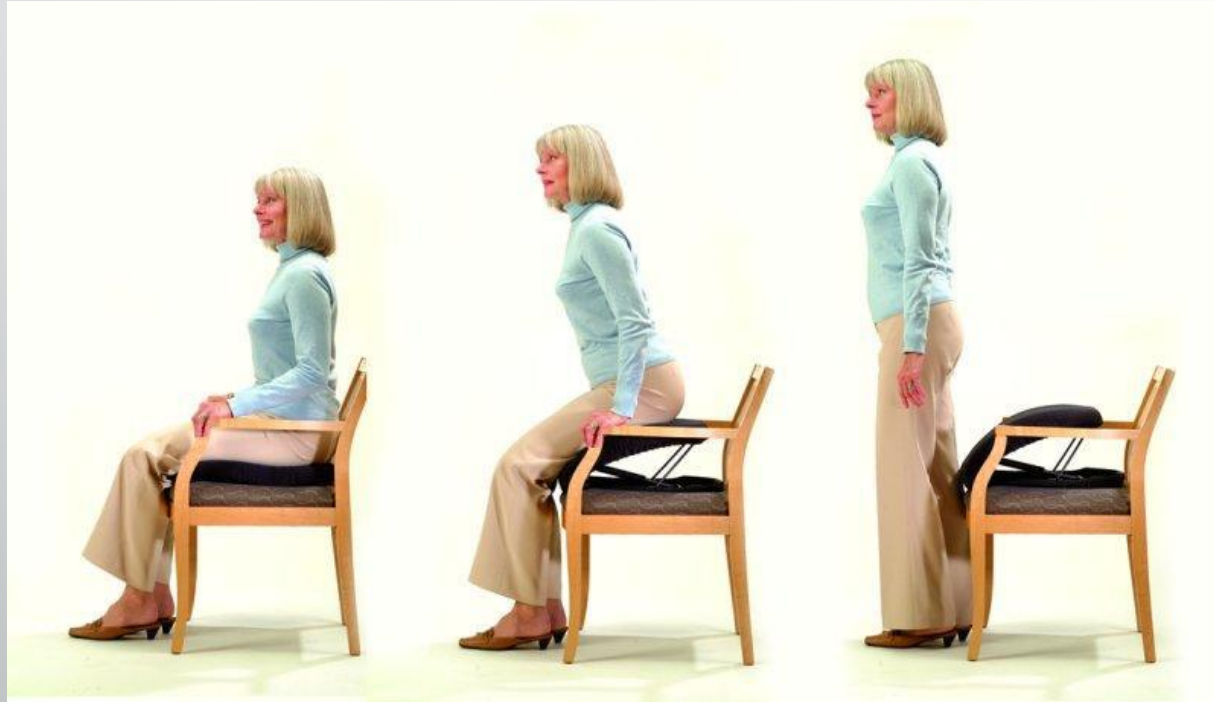
Compensatory Recommendations

- Initiation of compensatory techniques for deficit areas.
- Sitting on chairs with increased seat heights.
- Choosing chairs with armrests
- Adaptive equipment to raise seat heights for chairs and toilets
- Seat assist to facilitate coming to stand
- Lift style recliners
- Adjustable height beds

Kaboost



Uplift Seat Assist



Compensatory Techniques for Stairs

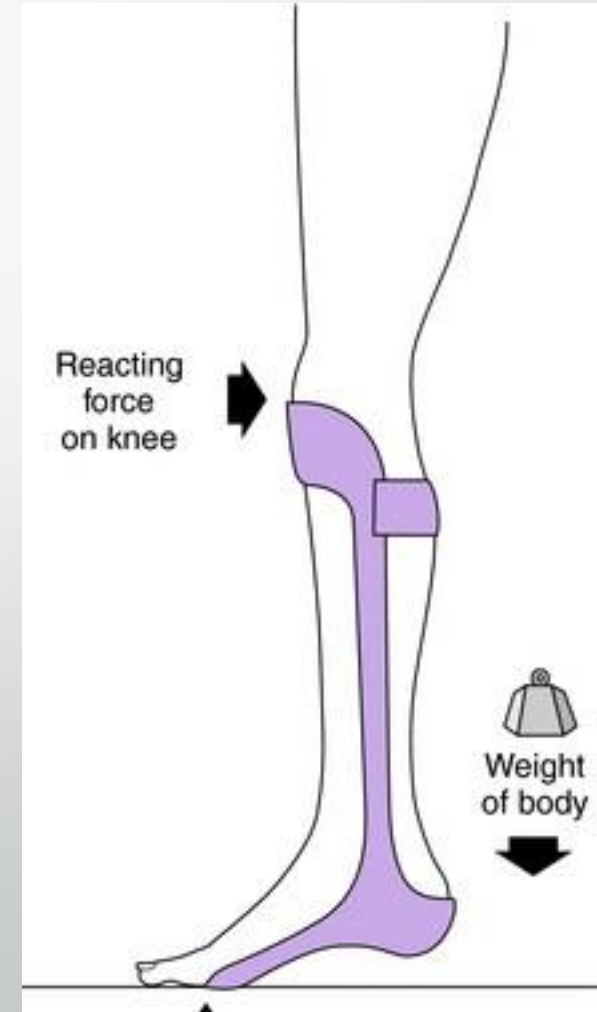
- Limit the number of times per day you need to use the stairs (energy conservation)
- Use the handrails on stairs to use arms to compensate for weak leg muscles.
- Use a non-alternating stepping pattern-up with the strong leg, down with the weak leg
- Stair glides – need to be sure the seat height is sufficient to allow patient to come to stand from the seat, especially at the top of the stairs.

Keep Moving

- Exercise as prescribed
- Use adaptive aids for support as weakness causes changes in balance
 - Canes
 - Walkers
 - Rollators
 - Scooters particularly for longer distances. Need to pay attention to tiller activation mechanism.

Knee Buckling

- Weakness in the muscles supporting the knees can cause them to “give out” or collapse from under a person when walking or standing.
- Bracing
 - Anterior or ground reaction AFOs – a brace that fits inside the shoe and then comes up the front of the shin to give support to the leg as the knee uncontrollably bends.
 - Helps some patients maintain ambulation for a longer period of time.



Why Not Use a Power WC?

- It is important to:
 - maintain leg strength/endurance
 - aerobic capacity
 - to facilitate the ability to be active
 - be independent in daily life.

Deciding to Use a Power Wheelchair

- Falls/safety
- Unable to participate in ADLs
- Difficulty being mobile in your home
- Unable to be independent in community mobility (Not covered by Medicare)
- Necessary to maintain employment

Criteria for Medicare Coverage

- Patient cannot safely ambulate in their home with the use of a cane, crutches, walker, manual WC or scooter.
- Patient has a neurological diagnosis such as myositis
- Patient has the desire to use a power WC
- Home is accessible to a power WC
- Weight is within the limits of the recommended device
- Power WC is recommended by an OT/PT/Physician familiar with DME evaluations and an ATP from a supplier. The ATP will complete a home assessment



Wheelchairs and Options to Promote Posture & Independence

- IBM qualifies patients to a rehab grade WC.
- This allows for:
 - more power options
 - expansion to allow for changes as the patient's needs change.

Basic Power WC vs. Rehab Level Power WC

- Options available include one of the following:

- Power tilt
- Power recline

- These allow for a combination of power options and joystick modifications.

Power Recline

Advantages

- Easier catheterization; can facilitate bladder emptying
- Pressure redistribution with at least 120 degrees of recline
- Can do weight shifts at desk/table if legs do not elevate
- Tray tops remain parallel to the floor
- May relieve orthostatic hypotension
- Passive range of motion of hips and knees
- Dependent transfers may be easier

Disadvantages

- Patient may not be able to reach other assistive technology devices
- Shear forces can disrupt alignment by allowing pt. to slide forward in seat
- Increased pressure over sacral area
- Can increase extensor tone/muscle spasms



Power Tilt

Advantages

- Reduces pressure when at a tilt of at least 45 degrees
- Maintains sitting angles so may inhibit muscle tone and maintain posture
- No shear forces
- Other assistive devices remain accessible
- Accommodates contoured positioning systems with fixed seat to back angles
- Range of motion limitations are accommodated



Disadvantages

- Must move away from work surface to tilt
- Items on tray will fall/slide unless secured
- Maintaining hips flexed can constrict the bladder
- Leg bags can leak during tilt
- Lack of movement at hips and needs can cause contractures unless a ROM program is in place
- Seat to floor height may be higher that can affect transfers and tabletop access

Power Wheelchair Driving Access

How will the chair be driven?

- Joystick Styles
- Standard with alternative handles available
- Mini
- Chin
- Magitek –Electronic sensors that can be placed on a band and controlled by head/finger/foot movements. Very versatile and can control all WC functions and computer access



Questions?

