

## Post-Botulinum Toxin Injection Iliopsoas Muscle(s) PT / OT Guidelines

The following are guidelines for physical therapists (PT) and / or occupational therapists (OT) treating patients post-Botulinum toxin (BOTOX®) injection of iliopsoas muscle(s). Aggressive therapy is indicated to facilitate stretching and lengthening of spastic/tight hip flexor musculature while promoting progressive strengthening of weakened musculature. Patients receiving BOTOX® injection will usually experience muscle soreness for 1 - 3 days following injection. Gentle PROM and positioning techniques are recommended for the first day or two after injection with progression to more aggressive stretching once muscle soreness subsides (usually by day 2 or 3). Some patients may be placed in bilateral long leg casts with spreader bar for 2 weeks following injection with parent(s) or caregiver(s) instructed to position patient in prone lying to promote stretching of hip flexor musculature. Once casts are removed, progression to aggressive stretching/strengthening is indicated. PT/OT should focus on PROM (AROM if appropriate), progressive strengthening and improving functional movement.

### Week 1

1. PROM (AROM if patient is able to participate)
2. Progressive strengthening of antagonists
  - Functional activities/transitional activities
  - Weight bearing activities
  - Gait activities
3. Instruct family (caregiver) in home exercise program including positioning and ROM.

### Week 2

1. Continue ROM
2. Continue strengthening exercises
3. Assess tone/ROM of injected muscles
4. Gait training/gait activities as appropriate

### Week 3

1. Continue ROM
2. Continue strengthening exercises
3. Continue assessment of ROM/tone of injected muscles
4. Continue gait training/gait activities

#### **Week 4**

1. Continue ROM
2. Continue strengthening exercises antagonist/agonists to promote development of muscle strength and control throughout the range
3. Continue gait training/gait activities

#### **Week 5**

1. Continue as above
2. Continue assessment ROM / tone of injected muscles and patient's overall functional movement

\*NOTE: the patient will follow up in clinic with the physician to appropriately assess benefits of BOTOX® therapy intervention anywhere from 4 to 8 weeks. A brief summary of patient's response to therapeutic interventions following BOTOX® injection would be very helpful in determining the need for subsequent BOTOX® injections. Response to BOTOX® therapy may vary with subsequent injections. It has been most often found patients have an increased response to subsequent injections. The effects of Botulinum toxin usually last about 3 months.

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