Physical Therapy Following Selective Dorsal Rhizotomy
Benefits of Selective Dorsal Rhizotomy

- **Strength**
  (Abbott, 1993 Boscarino, 1993)

- **Range of motion**
  (Abbott, 1993 Boscarino, 1993)

- **Functional mobility and self-care**
  (Dudgeon, 1994 Bloom, 1994)

- **Gait parameters**
  (Boscarino, 1993)

- **Others**
  (McDonald, 1991)
Pre-Operative Physical Therapy Assessment

- Range of motion
- Strength
- Functional Skills
- Gait Analysis
Post-Operative Physical Therapy General Principles

- Range of Motion
- Strengthening
- Functional Mobility Training
- Referrals
Immediate Post Surgical Physical Therapy: Week 1

- Day 1-4: 30 min/day
- Day 5-7: 30-45 min/ BID
Immediate Post Surgical Physical Therapy: Week 2

- 45-60 min/BID,
- Stretching
- Strengthening
- Developmental Skills
- Standing Program
- Assess orthotic needs
Immediate Post Surgical Physical Therapy: Week 3-6

- 45-60 min/BID
- Stretching
- Strengthening
- Ambulation
- Equipment
- Home program
Long Term Post Surgical Physical Therapy: 6 weeks-3 months

- 45-60 min/ 3-5x week
- Stretching
- Strengthening
- Ambulation
- Adapted bicycle/tricycle
Long Term Post Surgical Physical Therapy: 3-6 months

- 45-60 min/ 2-3x week
- Continue previous program
- Gait Patterns
Long Term Post Surgical Physical Therapy: 6-12 months

- 45 min/ 2-3x week
- Stretching and Strengthening
- Movement patterns
Long Term Post Surgical Physical Therapy: 1 year On

- 45 min/ 1-2x week
- Continue strengthening and refining normal motor control
- Continue to monitor orthotic needs

(UCLA Medical Center-Rhizotomy Protocol)
REFERENCES


• UCLA Medical Center: Department of Rehabilitation Services and Division of Neurosurgery-Selective Dorsal Rhizotomy Protocol (1997).