

Physical Therapy/Rehabilitation Management of Duchenne Muscular Dystrophy

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Presented at:
PPMD's End Duchenne Tour
Virtual Tour Stop

March 14, 2020

Assessment

Multidisciplinary assessment at regular intervals (every 6 months or more frequently if concerns, change in status, or specific needs are present):

- to assess present status and change over time
- to allow optimal individualized intervention
- to assess effect of intervention
- to assess and optimize improvement with disease modifying treatments

** details in DMD Care Considerations & Rehabilitation Article in Pediatric Supplement 2018 (see last slide for references):

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5869704/>

<https://www.cdc.gov/ncbddd/musculardystrophy/care-considerations.html>

https://pediatrics.aappublications.org/content/142/Supplement_2/S17

Intervention

Comprehensive, anticipatory, preventative management across the lifespan

- Direct treatment by PT, OT, SLP tailored to individual needs
- Musculoskeletal management
 - Stretching
 - Orthotic intervention (AFOs, KAFOs, knee splints, wrist or hand splints, serial casting)
 - Supported standing
 - Custom seating & power positioning components in wheelchair
- Exercise and activity – gentle, submaximal, avoid eccentric & resistive exercise
- Falls and fracture prevention and management
- Management of learning, attentional, & sensory processing differences
- Assistive technology and adaptive equipment
 - For musculoskeletal management
 - For function, independence, and participation
- Pain prevention and management
- Participation
- Transition into and through adulthood

** details in DMD Care Considerations & Rehabilitation Article in Pediatric Supplement 2018 (see previous slide for links and last slide for references)

references

Case LE, Apkon SD, Eagle M, Gulyas, A, Juel, L, Matthews, Dnewton, R, Posselt, HF. **Rehabilitation Management of the Patient With Duchenne Muscular Dystrophy.** *Pediatrics*. Oct 2018;142(Suppl 2):S17-S33

Birnkrant DJ, Bushby K, Bann CM, Apkon SD, Blackwell A, Brumbaugh D, Case LE, Clemens PR, Hadjiyannakis S, Pandya S, Street N, Tomezsko J, Wagner KR, Ward LM, Weber DR; DMD Care Considerations Working Group. **Diagnosis and management of Duchenne muscular dystrophy, part 1: diagnosis, and neuromuscular, rehabilitation, endocrine, and gastrointestinal and nutritional management.** *Lancet Neurology* 2018 Apr 17 (3), 251-267.