## **Physical Therapy**

Parent JOINTHEFIGHT.
Project ENDOUGHENNE.
Muscular
Dystrophy

Claudia Senesac, PT, PhD

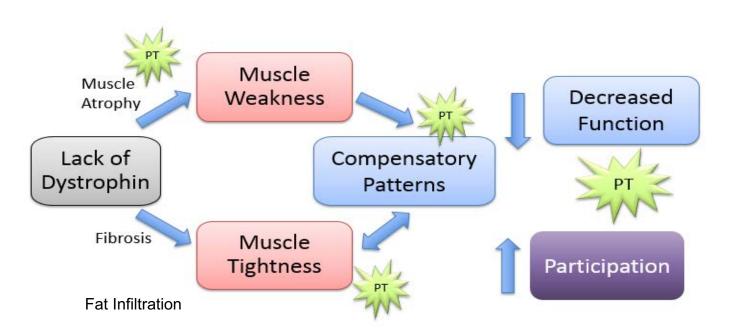
Board-Certified Clinical Specialist in Pediatric Physical Therapy 6/27/2019

### Long Term Goals for PT Intervention

- Support participation
  - Family and friends
  - School
  - Community
- Support independent mobility
- Support functional independence
- Support comfort and limit pain
- PT's are specialists at adapting and modifying activities and environments
  - We are trained to be <u>"Movement Experts"</u>



### PT Role in Disease Process



### Exercise/Physical Activity

 Exercise is any bodily activity that enhances or helps to maintain physical fitness and overall health and wellness.











### Exercise/Physical Activity

No exercise leads to muscle atrophy

Too much exercise leads to muscle breakdown

Resistive exercise is too much







### Exercise Recommendations

 Age appropriate recreational activities as opposed to strengthening regimes

- Balance activity with rest...
  - Avoid generalized fatigue
  - Avoid muscle soreness
- What if we overdo?
  - Rest and modulation are OK!
  - Decrease intensity
  - Decrease duration

### Aquatic Activities

- Safest form of exercise
  - Non weight bearing low load activity
  - Able to move through available range of motion
  - May improve aerobic function
  - Can encourage walking
- Develops independence and confidence
- Fosters a life long recreational activity
- Freedom of movement in later years
- Fun with family and friends
- Make sure your child is safe in the water



## Why is Flexibility Important?

- May improve symmetry
- May prolong standing and walking
- Can aid wheelchair positioning
- May improve comfort







## Gentle Stretching Activities That Fit Your Lifestyle

- Parent assisted stretching
  - Active assist
  - Passive
- Self assisted stretching







### Stretching

- Younger boys <u>may</u> respond better to stretching when tightness begins
  - Temporary increase in range may be possible
  - Early on a combination of stretching activities <u>may</u> lend itself to small gains in range
- Older boys <u>may</u> benefit from stretching
  - Increased blood flow to muscles and surrounding areas
  - Feeling of well-being
  - Mobility of joint through "available range"

### Ankle and Hand Splints

- Night splints provide prolonged stretch 6+hours
  - Younger boys- wear at night
  - Older boys- day or night
- Hand splints for older boys
  - Alternate arms





Cascadedafo.com

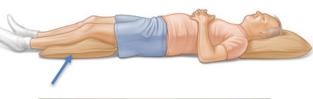
### Positioning Activities

- Long sitting
- Tummy lying
- Side lying flat back
- Lying on back flat back
- Keep knees together\*
  - WC, lying flat, tummy lying





These pillows between and under the knees help to flatten back





### Equipment - Standing Frames







EasyStand.com
Permobile
Other things to consider

\*Consult your PT about your child

"Caution with alignment"

Evidence suggests: 90 Minutes

# Equipment - Powered Mobility Devices

Introduce for recreation and outdoor play
Allows boys to keep up with peers
Access for long distance community events
May prevent falls during transition periods







"Caution with alignment"

### Equipment

- Medtrade Expo
- Fall 2019 Atlanta Ga.
- October 21-23, 2019
   Georgia World Congress Center Atlanta,
   GA

#### Takeaways

- 1. Activity is good
  - 2. Don't Overdo
- 3. Participation is Important
  - 4. Flexibility stay mobile
- 5. Stretching more than just ROM
- 6. Positioning & Bracing may influence comfort
  - 7. Equipment when needed
    - 8. Mobility Devices
      - 9. PT's can help





Claudia Senesac, PT, PhD, PCS csenesac@phhp.ufl.edu