Physical Therapy Perspective on Ataxia

Roger Fong, MPT
University of Chicago Medical Center
March, 2010
Definition: Physical Therapist

- Physical therapy...dynamic profession with an established theoretical and scientific base with widespread clinical applications in the restoration, maintenance and promotion of optimal physical function
- Provides services to patients/clients who have impairments, functional limitations, disabilities (the disablement model) or changes in function and health status resulting from injury, disease, or other causes
- Diagnose and manage movement dysfunction
Definition: Ataxia

Ataxia stems from the dysfunction of the nervous system. Ataxia is a movement disorder due to an impairment of the somatosensory, visual, & vestibular system or a combination.
Practice Settings

- Hospitals: CCU/ICU, acute, sub-acute
- OP clinics/offices
- SNF, extended care
- Homes
- School systems
- Research/academia
- Corporate/industrial health centers
- Hospice
- Athletic facilities (HS, college, professional)
- Fitness centers/sports training
My Role in Ataxia

My role as a therapist is to teach you &/or your caretaker to optimize your function while being safe so you can do what you WANT to do instead of what you NEED to do.
Elements of Patient Client Management

- Examination/re-examination
- Evaluation
- Diagnosis
- Prognosis
- Intervention
Examination

- Required prior to the initial intervention
- Comprehensive screening and specific testing process leading to diagnostic classification

- 3 components:
  - Patient history
  - Systems review
  - Tests and measures
Patient History

- General demographics
- Social history
- Employment/work/school/play
- Growth/development
- Living Environment
- General health status
- Social /health habits
- Family history
Patient History

- Medical and surgical history
- Medications
- Current/chief complaint
- Functional status and activity level:
  - Current
  - Prior (6-12 months)
- Other clinical tests
Help Paint a Picture of your Daily Routine
Systems Review

Includes a brief assessment of:

- Cardio-pulmonary
- Integumentary
- Musculoskeletal
- Neuromuscular systems
- Communication abilities

How these components affect the ability to initiate, sustain and modify purposeful movement for performance of an action, task or activity that is pertinent to function.
Tests and Measures

- Means of gathering data about the patient
- Formed by generation of diagnostic hypotheses from history and systems review
- Used to:
  - Rule out causes of impairment and functional limitation
  - To establish a diagnosis, prognosis and plan of care
  - To select interventions
## Tests and Measures

**Examples:**

<table>
<thead>
<tr>
<th>ROM (including mm length)</th>
<th>Reflexes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscle performance (strength, power, endurance)</td>
<td>Sensation</td>
</tr>
<tr>
<td>Gait</td>
<td>Self-care</td>
</tr>
<tr>
<td>Balance (static vs dynamic)</td>
<td>Aerobic capacity</td>
</tr>
<tr>
<td>Joint integrity</td>
<td>Assistive/adaptive devices</td>
</tr>
<tr>
<td>Pain</td>
<td>Ergonomics/body mechanics</td>
</tr>
<tr>
<td>Posture</td>
<td>Coordination</td>
</tr>
<tr>
<td></td>
<td>Movement pattern</td>
</tr>
</tbody>
</table>
Evaluation

► A dynamic process of making clinical judgments gathered from the examination
Prognosis

- Determination of the prediction of the optimal level of improvement in function and the amount of time needed to reach that level
- Includes the plan of care (statements that specify goals, expected outcomes, frequency and duration of care)
Intervention

- Therapeutic Exercise
- Functional Training: self-care, home management, ADL's, IADL's
- Functional Training: work, community and leisure, re-integration, conditioning
- Manual therapy-mobilizations & manipulation
- Prescription/fabrication of devices, equipment (assistive, adaptive, orthotic, protective, supportive, prosthetic)
Interventions

▶ Patient & family education (transfers, assistance)
▶ Intensity & frequency
▶ SAFETY FIRST
▶ ACTIVITY IS GOOD... IF YOU DON’T USE IT, YOU LOSE
Assistive Devices
Wheel Chairs
Scooters
Thank you for your attention