Rehabilitation and Chordoma Care

Jayne Donovan, MD
What is a physiatrist?

• Physician (MD or DO) specializing in Physical Medicine & Rehabilitation (PM&R)

• Care of individuals with:
  – Spinal cord injury
  – Cancer
  – Brain injury
  – Stroke
  – Amputations
  – Musculoskeletal disorders
  – Cardiopulmonary disease
Physiatrists focus on maximizing function...

...and improving quality of life
Sample PM&R Problem List

- Rehabilitation:
  - Mobility
  - Activities of daily living
  - Cognition
  - Swallowing

- Equipment

- Community reintegration

- Vocational rehabilitation

- Barriers:
  - Pain
  - Spasticity/ muscle tightness
  - Fatigue
  - Adjustment
  - Respiratory status
  - Blood pressure issues
  - Neurogenic bowel
  - Neurogenic bladder
  - Sexual dysfunction
  - Skin issues
Sample PM&R Problem List

- Rehabilitation:
  - Mobility
  - Activities of daily living
  - Cognition
  - Swallowing

- Equipment

- Community reintegration

- Vocational rehabilitation

- Barriers:
  - Pain
  - Spasticity/ muscle tightness
  - Fatigue
  - Adjustment
  - Respiratory status
  - Blood pressure issues
  - Neurogenic bowel
  - Neurogenic bladder
  - Sexual dysfunction
  - Skin issues
The Rehabilitation Team

- Physiatrist
- Physical therapist
- Occupational therapist
- Speech therapist
- Recreational therapist
- Psychologist
- Social worker
- Case manager
- Primary medical team
Where does rehabilitation occur?

- Acute care hospital
- Inpatient rehabilitation facility
- Subacute rehabilitation
- Long term acute care hospital
- Home
- Outpatient
- Local gym
## Rehabilitation Goals

<table>
<thead>
<tr>
<th>Activity</th>
<th>C1-C4</th>
<th>C5</th>
<th>C6</th>
<th>C7</th>
<th>C8-T1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeding</td>
<td>Dependent</td>
<td>Independent</td>
<td>Independent</td>
<td>Independent</td>
<td>Independent</td>
</tr>
<tr>
<td>Grooming</td>
<td>Dependent</td>
<td>Min assist</td>
<td>Some assist</td>
<td>Independent</td>
<td>Independent</td>
</tr>
<tr>
<td>UE Dressing</td>
<td>Dependent</td>
<td>Requires assist</td>
<td>Independent</td>
<td>Independent</td>
<td>Independent</td>
</tr>
<tr>
<td>Bed Mobility</td>
<td>Dependent</td>
<td>Requires assist</td>
<td>Requires assist</td>
<td>Independent</td>
<td>Independent</td>
</tr>
<tr>
<td>Transfers</td>
<td>Dependent</td>
<td>Max assist</td>
<td>Requires assist</td>
<td>Independent</td>
<td>Independent</td>
</tr>
<tr>
<td>WC Propulsion</td>
<td>Power WC</td>
<td>Power WC</td>
<td>Power WC</td>
<td>Manual WC</td>
<td>Manual WC</td>
</tr>
</tbody>
</table>
Mobility

• Physical therapy

• Focus on:
  – Upright tolerance
  – Transfers
  – Wheelchair mobility
  – Ambulation
  – Stairs
Mobility

- Physical therapy

- Focus on:
  - Upright tolerance
  - Transfers
  - Wheelchair mobility
  - Ambulation
  - Stairs
Mobility

- Physical therapy

- Focus on:
  - Upright tolerance
  - Transfers
  - Wheelchair mobility
  - Ambulation
  - Stairs
Mobility

- Physical therapy

Focus on:
  - Upright tolerance
  - Transfers
  - Wheelchair mobility
  - Ambulation
  - Stairs
Activities of Daily Living

- Occupational therapy

- Focus on:
  - Eating
  - Bathing
  - Grooming
  - Bathing
  - Upper body dressing
  - Lower body dressing
  - Toileting
  - Transfers
Swallowing and Cognition

• Speech therapy

• Focus on:
  – Swallow evaluation
  – Swallow strategies
  – Advancement of diet
  – Cognitive evaluation
  – Cognitive strategies
Assistive Technology

- Alternative computer access
- Electronic aids to daily living
- Ergonomics
- Mobility, seating, positioning
- Communication

walkthechat.com  http://spauldingrehab.org/
Transportation and Driving

- Accessible transportation
- Adaptive driving
- Driving evaluation
  - Vision
  - Spatial awareness
  - Sequencing
  - Ability to identify and safely respond to hazards
  - Gas/brake/steering reaction time
  - Need for adaptive equipment

www.abilitycenter.com  adaptivedealer.wordpress.com
Adaptive Sports

- Cycling
- Golf
- Tennis
- Horseback Riding
- Rock Wall Climbing
- Archery
- Stunt Kite Flying
- Therapeutic Drumming
- Seated Cardio Aerobic Classes
- Wheelchair Dance
- Wheelchair Basketball
- Sitting Volleyball
- Yoga

- Alpine (Downhill) Skiing
- Nordic (Cross-country) Skiing
- Curling
- Sled Hockey
- Ice Skating
- Outrigger Canoeing
- Stand-up Paddling
- Rowing
- Kayaking
- Sailing
- Windsurfing
- Water Skiing
- Fishing
Adaptive Sports

BOSTON – Adaptive Sports and Recreation

DR. CHARLES H WEINGARTEN
ADAPTIVE SPORTS PROGRAM

The Dr. Charles H. Weingarten Adaptive Sports and Recreation Program provides individuals with disabilities an opportunity to participate in a wide range of therapeutic sport and recreation activities. All levels and abilities welcome.

PROGRAM STARTS TUESDAY, MAY 3

Activities offered:
- Windsurfing
- Stand Up Paddling
- Cycling
- Outrigger Canoeing
- Glide Cycling
- Kayaking
- Rowing
- Tennis

Program runs from May through October at the Spaulding Adaptive Sports Pier located at 300 First Avenue in Charlestown, MA.

May: Tuesday and Thursday
June: Monday through Thursday
July: Monday through Friday
August: Monday through Friday
September: Monday through Thursday
October: Tuesday and Thursday

Sessions run for 90 minutes at $20 per session. Or, buy a 3-visit pack for $50.

Registration opens April 11, 2016. To register please call 877-976-7272.

http://spauldingrehab.org
Barriers to Rehabilitation and Function

- Pain
- Spasticity/ muscle tightness
- Fatigue
- Adjustment
- Respiratory status
- Blood pressure issues
- Neurogenic bowel
- Neurogenic bladder
- Sexual dysfunction
- Skin issues
Physiatrists utilize cutting-edge as well as time-tested treatments to maximize function and quality of life.
ABOUT PM&R

WHAT DOES A PHYSIASTRT DO? (PRONOUNCED FIZZ EE AT’ TRIST OR FIZZ EYE’ UH TRIST)

A Physiatrist is a physician specializing in physical medicine and rehabilitation (PM&R). PM&R or physiatry is the branch of medicine emphasizing the prevention, diagnosis, treatment, and rehabilitation of disorders, particularly those of the neuromusculoskeletal, cardiovascular, and pulmonary systems, that may produce temporary or permanent impairment. Physiatry is unique among medical fields in that its area of expertise is the functioning of the whole patient, as compared with a focus on an organ system or systems.

RESTORING MAXIMUM FUNCTION

Physiatrists treat conditions of the bones, muscles, joints, brain, and nervous system, which can affect other systems of the body and limit a person's ability to function. The PM&R physician is very skilled in performing musculoskeletal and neurologic examinations. Aside from the history and physical that are the foundation of any patient evaluation, the physiatrist is also trained to utilize laboratory investigations and imaging studies, particularly of the musculoskeletal and central nervous systems.

LECTURES

Click here to access view a PDF of the powerpoint slides "An introduction to Physical Medicine & Rehabilitation", a presentation developed by the AAP and APEC in April 2012.

Please e-mail brening@physiatry.org if you would like a copy of the powerpoint file (.ppx).
THANK YOU!
Management of Spasticity

- Not all spasticity needs to be treated
- Consider treatment when:
  - Limiting function (mobility, ADLs, sleep)
  - Associated pain
  - Risk of contracture formation
  - Contributing to skin breakdown
  - Limiting care
Management of Neurogenic Bladder

Goals:
• Prevent complications
• Avoid incontinence
• Realistic program

Treatments:
• Behavioral
• Pharmacological
• Surgical
Management of Neurogenic Bowel

Bowel program = unique plan designed to eliminate stool and prevent incontinence

Goals:
- Regular evacuation
- Prevent complications
- Avoid incontinence
- Efficient evacuation

Treatments:
- Behavioral
- Pharmacological
- Surgical