Physiatric Approaches to Myositis

Tae Chung, MD
Assistant Professor
Physical Medicine and Rehabilitation and Neurology
Johns Hopkins University
Physiatry? Physiatrist?

- Pronounced fizz ee at' trist or fizz i’ a trist
- NOT psychiatry!
- Same as “Physical Medicine and Rehabilitation” or PM&R
- What is physiatry then?
Physiatry

• A medical specialty (MD or DO)

• Focused on “disability” rather than disease itself

• Deals with ANY disease conditions that result in physical disability

• Population-based on specialty (such as pediatrics or emergency medicine)
Concepts

• **IMPAIRMENT**: any loss of physiological or anatomical structure or function at the level of organ or system function.
  
  – Example: inflammation/degeneration of muscle, joint arthritis, etc.

• **DISABILITY**: disability is any restriction or lack (resulting from an impairment) of ability to perform an activity or a function
  
  – Example: muscle weakness from myositis, difficulty walking, difficulty swallowing, etc.

• **HANDICAP**: limited social integration due to disability
  
  – Example: inability to access to a building with stairs, difficulty using public toilet
Impairment ≠ Disability ≠ Handicap

• Example: amyopathic dermatomyositis -> may have tissue impairment, but no disability or handicap

• Example: patient who’s independent on wheelchair -> may have both impairment AND disability, but NOT handicap

• Example: patients with dwarfism -> no impairment or disability but may have handicap
Physiatric Approach

- Impairment
- Disability
- Handicap

Myositis
Case Example

• 65 year old male
• Test results are consistent with an inclusion body myositis
• Progressive muscle weakness in upper and lower limbs
• Falls down a few times a month
• Difficulty with swallowing
• What do we do?
Physiatric Approach

Impairment

Disability

Handicap

Myositis
Treating Impairment

• What’s the impairment? – muscle inflammation & degeneration

• Potential use of IVIG, steroids, methotrexate, etc: “medical treatment”

• Therapeutic exercise, aiming to slow down the progression
Physiatric Approach

- Impairment
- Disability
- Handicap

Myositis
Identifying Disability

- Difficulty walking and frequent falls
- Difficulty swallowing
- Difficulty with fine motor skills: can’t type, etc.
- Difficulty with heavy weight lifting, etc.
Physiatric Intervention of Gait Dysfunction

- First, identify the problem – why can’t they walk? Balance? Frequent falls? Too slow?

- Second analyze gait – appropriate speed? Good turning? Avoid obstacles OK?

- Other consideration – level of activity? Do we even need to fix this problem?
Typical Gait Abnormality in IBM

- Usually “buckles” or “collapses” at the knee
- Knee hyperextension (“genu recurvatum”)
- Uneven surfaces; crowded area; long distance
Strategies for Gait Abnormality in IBM

• If mild, a cane or a walking pole may be enough

• Provides extra-sensory feedback

• Do not underestimate the power of cane!
Ankle brace can significantly reduce fall risks!

Recommended for patients who actually walk.

Brace needs to be designed by a specialist! (don’t go to Walmart for this!)
Strategies for Gait Abnormality in IBM

• Rolling walker is excellent for long distance walking

• Can sit for rest

• Don’t worry, you don’t look old(er) on a walker!
Wheelchairs

- Must be custom-fitted!
- Who’s pushing it?
- How to carry it?
- Prevention of pressure sore
Motorized wheelchair ≠ Scooter
New rehab technologies - exoskeleton

• Paralyzed patients can walk
• Limitation: battery life, stairs, and uneven surfaces

IMAGE: Lockheed Martin FORTIS Exoskeleton
Difficulty Swallowing

- Requires swallowing evaluation by “speech therapists”
- Dietary modification
- Esophageal dilatation
- Swallowing exercise
Physiatric Approach

- Impairment
- Disability
- Handicap

Myositis
Identifying Handicap

- Wheelchair access?
- Use of public toilet – safe? Independent?
- Consider home therapy, nursing facility, etc.
- Important to identify therapists or social workers who are familiar with resources
Summary

• Three different aspects of disease: impairment, disability, and handicap

• There are various ways to address disability and handicap

• Physiatric intervention can be helpful
Where can you find physiatrists?

- Google PM&R doctors around your area!

- More information can be found in AAPMR (American Association of PM&R) website: https://www.aapmr.org/about-physiatry/about-physical-medicine-rehabilitation
QUESTIONS?