Webinar Series













Symptom Management: Sensory Components

Tuesday, July 14, 2020

Presented by:









Genentech





National Multiple Sclerosis Society







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Neurologist

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Learning Objectives

- The ways that sensory changes in MS can affect function
- How sensory changes can impact activities of daily living
- Treatment and management strategies to compensate for sensory loss and who to see for treatment



A Dozen Sensory Symptoms

- Visual changes
- Numbness/Tingling/Crawly sensations/Cold Feet
- MS Hug
- Dizziness, light headedness and vertigo
- L'hermittes
- Trigeminal Neuralgia
- Neuropathic pain
- Sensory changes effecting balance and coordination
- Spasms in arms and legs
- Hearing loss
- Dyspareunia (painful intercourse)
- Dysuria





Polling Question

How frequently in the past 12 months have you had difficulty with sensory problems?

- a) Never
- b) A little (less than 25%)
- c) Sometimes (26-50%)
- d) Frequently (51-75%)
- e) Consistently (76-700%)





The Eyes

- Optic/retrobulbar neuritis
- Diplopia (double vision)
- Internuclear ophthalmoplegia (INO)







Polling Question

How frequently in the past 12 months have you experienced any vision problems?

- a) Never
- b) A little (less than 25%)
- c) Sometimes (26-50%)
- d) Frequently (51-75%)
- e) Consistently (76-700%)





• 80% of the MS population have vision problems

• Symptoms long term can fluctuate with fatigue, temperature increases (Uthoff's phenomenon), stress, infections



- Optic / Retrobulbar neuritis
 - Definition: inflammation and demyelination of the optic nerve
 - Creates "holes" in visual field
 - Colors are "washed out"
 - Decreased contrast sensitivity
 - Blurred or loss of vision
 - Pain with eye movement



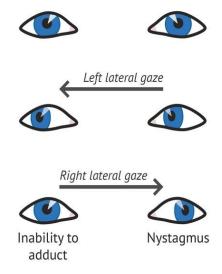


- Diplopia/Double Vision
 - Weakened and uncoordinated eye muscles
 - May cause depth perception problems
 - Brain will compensate and symptoms will resolve
 - Eye patching should only be done intermittently for function
 - Prism glasses (prescribed by a NeuroOptometrist/Neurophthamologist) may help



- Internuclear Opthalmoparesis (INO) impaired horizontal eye movements
 - Can cause nystagmus, double vision, blurred vision

Look For Inability to adduct one eye, with nystagmus in the other eye.







- Abnormal smooth pursuit inability to maintain gaze on a moving target
- Nystagmus
 - Definition: rhythmic oscillation of the eyes
 - Causes blurring or movement of environment
 - May be able to turn head and find "null"spot
 - May respond to medications
- Cataracts
 - Causes clouding of vision
 - Can be caused by cortisone use
 - Requires surgical removal







Vision Problems – Who To See?

- Neurologist
 - Diagnosis
 - Rule out need for medical intervention
 - Rule out medication as a cause
- NeuroOptometrist/Neurophthamologist
 - Optometrist who specializes in vision problems related to neurologic diagnoses
 - May prescribe specialty glasses eg prisms
- Occupational Therapist who has a Specialty Certification in Low Vision
 - Low or High Tech Devices
 - Compensatory Techniques
 - Exercises





Vision Problems – Low / Hi Tech

- Increase font size
 - Magnifying glass
 - Computer setting
- Text to speech device setting
- Voice commands
- Eliminate Glare, Adequate Lighting (consider type of lighting)
- Increase contrast on device or in home by adding brightly colored borders to light switches, steps, doorways
- Organize your home to easily find things



Polling Question

How frequently in the past 12 months have you experienced any numbness or tingling?

- a) Never
- b) A little (less than 25%)
- c) Sometimes (26-50%)
- d) Frequently (51-75%)
- e) Consistently (76-700%)





Dysesthesias/Paresthesias(Abnormal Sensations)

- Numbness/Tingling
- Itching/Crawly sensations
- Burning pain
- Cold Feet
- MS Hug







Other Electrical Sensations

L'Hermitte's

Definition: electric shock sensation down spine triggered by forward flexion of the neck

Trigeminal Neuralgia

Symptoms: severe pain or burning or tingling in forehead, cheek and jaw (usually only on one side) caused by inflammation of the trigeminal nerve



Painful Spasms

- Medical intervention
- Therapy intervention



Managing Pain

Components of Pain Perception

- Source of pain
- Experience with pain / trigger
- Protective behavior
- Social response
- Communicating pain



Polling Question

How frequently in the past 12 months have you experienced any difficulty with your walking or balance due to numbness or tingling?

- a) Never
- b) A little (less than 25%)
- c) Sometimes (26-50%)
- d) Frequently (51-75%)
- e) Consistently (76-700%)





Somatosensation

Environment Challenges

- Moving terrain planes, ships, docks, amusement park rides
- Uneven terrain grass, sand, broken pavement
- Compliant surfaces thick rugs, soft shoes



Compensatory Techniques

- Shoe choice
 - Avoid shoes with soft cushion
 - Avoid shoes that don't stay secure on your feet
- Choice of rugs/terrain
 - Firmer the better
- Assistive device
 - Support for balance
 - Another connection to the ground
- Orthotics
 - Insures control of foot, ankle







Assistive Devices Choices













Orthotics – Low Tech











Orthotics – Hi Tech









Balance-Based Torso Weighting®Vest

by Motion Therapeutics







How to choose

Evaluation by Physical Therapist with trial of equipment

What makes you walk most normally?

When your walking is more normal:

- Less energy expenditure/fatigue
- Less spasticity
- Decrease fall risk







Balance Problems

- Vertigo
 - World spinning
- Dizziness
 - Unsteady feeling
- Lightheadedness
 - Passing out feeling







Vertigo

Rule out

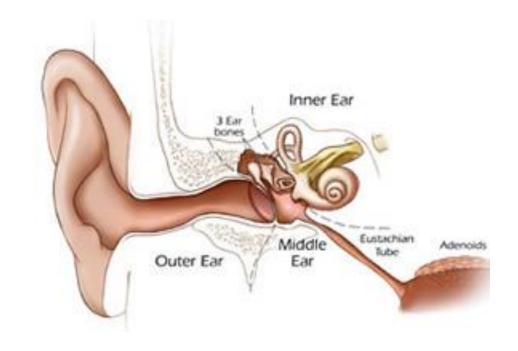
- BPPV
 - Immediate onset with specific head movements
 - Symptoms subside within a minute
 - Easily resolved with treatment by Physical Therapist
- Brainstem attack
- Inner ear infection or virus



Sensory Organization











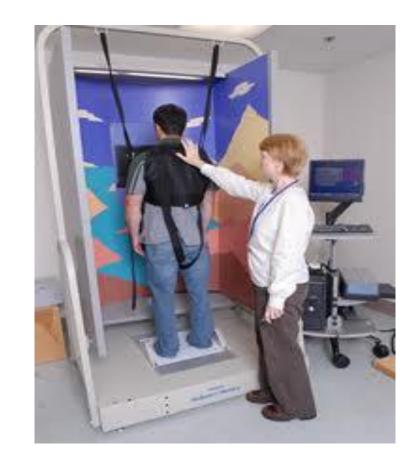
Dizziness

Evaluate

- √ Somatosensation
- ✓ Vision and use of visual input
- ✓ Vestibular system

Treatment by Physical Therapist

✓ Exercises guided by above evaluation







Unusual Sensory Problems

Hearing

• Dyspareunia (Painful intercourse)

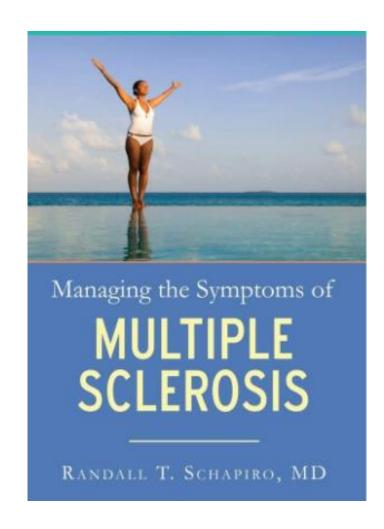
• Dysuria (Painful urination)

Key Take-aways



Resources

- <u>Vision Problems in Multiple Sclerosis</u>
 National MS Society (Brochure)
- Managing the Symptoms of Multiple Sclerosis by Randall T. Schapiro, MD, FAAN (Book)
- Keeping an Eye on MS
 Can Do MS (Webinar)
- <u>Strategies to Improve Functional Vision</u>
 <u>Performance in MS</u>
 by Fay Jobe Tripp, MS, OTR/L, CDRS Can Do MS (Article)







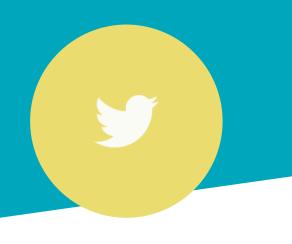
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Everything we do is focused so that people affected by MS can live their best lives as we stop MS in its tracks, restore what has been lost and end MS forever.



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to navigate the challenges of life with multiple sclerosis





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Webinar Series













Relationships and Intimacy

Tuesday, August 11, 2020

Presented by:









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