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PARKINSON'S DISEASE AND SPEECH THERAPY

OBJECTIVES

Discuss the role of the Speech-Language Pathologist (SLP) in the evaluation and treatment of people with Parkinson's Disease

Learn basic strategies to help improve or maintain speech, voice, cognition, and swallow function

# SPEECH-LANGUAGE PATHOLOGIST (SLP)

Also known as a Speech Therapis (ST)

They evaluate, develop a plan of care, and treat many types of communication and swallowing problems. A licensed SLP has a Masters or a Doctorate degree in Speech Pathology and has completed Clinical Fellowship usually in a setting they want to specialize in.

The American Speech-Language-Hearing Association (ASHA) is the national professional, scientific, and credentialing association for audiologists, SLP practitioners, and SLP researchers/scientists. LPs work with people of all ages, from babies to adults.

Every state has a licensure board and registration agency that is responsible for regulating the profession.

#### PROBLEMS WE TREAT IN PD

#### SPEECH PROBLEMS

PD may affect your ability to produce sounds or put together sounds into words, phrases and sentences. This condition is known as Dysarthria. Hypokinetic dysarthria is the prototypical motor speech disorder in PD.

Characteristics:

- Reduced vocal loudness
- Monotone/monopitch
- Imprecise articulation
- Short rushes of speech, decreased vowel space area
- Dysfluency/repeated phonemes

#### PROBLEMS WE TREAT IN PD

#### VOICE PROBLEMS

Changes to the voice can occur suddenly or gradually over time. This is known as Dysphonia. Characteristics:

- > Hoarse
- ➢ Rough
- Raspy
- Strained
- ≻ Weak
- > Breathy
- ➤ Gravely

### PROBLEMS WE TREAT IN PD

COGNITIVE-COMMUNICATION PROBLEMS

Cognitive domains that may be affected in PD

- > Attention and working memory
- Executive function
- > Memory
- ≻ Language
- Visuospatial functions

### PROBLEMS WE TREAT IN PD

- SWALLOWING PROBLEMS
- According to the American Speech- Language Hearing Association (ASHA), 33%-50% of patients with PD have symptoms of dysphagia
- Severity and duration of PD does not predict presence or severity of the swallowing problem
- Some potential risk factors or signs are recurrent pneumonias, diminished cough effort, sialorrhea (excessive secretions or drooling)
- > Dysphagia can lead to malnutrition, dehydration, or aspiration.

HOW DO I KNOW IF I HAVE A SWALLOWING PROBLEM?

SOURCE: PARKINSON'S FOUNDATION have recently lost weight without trying

I tend to avoid drinking liquids.

I get the sensation of food getting stuck in my throat.

I tend to drool.

I notice food collecting around my gum line.

I tend to cough, or choke when eating or drinking.

I often have heartburn or sore throat.

I have trouble keeping food or liquid in my mouth.

# STRATEGIES FOR SPEECH

Daily oral motor exercises for the lips, tongue and jaw ( as prescribed by your SLP)

Breathing exercises

Pacing technique

**Exaggerated articulation** 

**Prolonged vowels** 

Breathing exercises

Vocal hygiene strategies

Voice exercises (as prescribed by the SLP) like humming, projecting your voice, increasing/decreasing loudness

Reading passages out loud using easy onset

Lee Silverman Voice Treatment (LSVT)

SPEAK OUT!

# STRATEGIES FOR VOICE

## STRATEGIES FOR COGNITION

Doing brain exercises daily e.g Lumosity, word games, card games

Establishing a daily routine, using external visual cues such as calendars, boards, or daily journals

Having meaningful conversations about a movie, a book, a show etc.

Staying socially active

Verbalize/Repeat

Association/Visualization strategies

Word retrieval exercises

STRATEGIES FOR SWALLOWING Sit upright close to 90' when eating and drinking.

Avoid distractions

Focus on chewing and swallowing "hard and fast"

Eat slowly, take small bites and sips

Alternate food and liquids

Modify diet as prescribed by SLP

Take pills one at a time or with applesauce/yogurt/ice cream!

Oral care after meals

### REFERENCES

- Broadfoot, C.K., Abur, D., Hoffmeister, J.D., Stepp, C.E., & Ciucci, M.R. (2019) Research-based updates in swallowing and communication dysfunction in Parkinson's disease: Implications for evaluation and management. *Perspectives on Voice and Upper Airway Disorders*, 4 (5), 825-841.
- Spencer, K., Sanchez, J., McAllen, A., & Weir, P. (2010). Speech and cognitive-linguistic function in Parkinson's Disease. *Perspectives on Neurophysiology and Neurogenic Speech and Language Disorders, 20 (2), 31-38.*

#### RESOURCES

- National Foundation of Swallowing Disorders <u>www.swallowingdisorderfoundation.com</u>
- American Speech-Language Hearing Association <u>www.asha.org</u>
- Parkinson's Foundation <u>www.Parkinson.org</u>
- Cleveland Clinic <u>www.myclevelandclinic.org</u>
- Lee Silverman Voice Treatment <u>www.lsvtglobal.com</u>
- Parkinson Voice Project <u>www.parkinsonvoiceproject.org</u>