#### Connecting the Dots: How Speech, Cognition, and Swallowing Interact in Parkinson's

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#### Challenges in Parkinson's Disease

- Speech
- Cognition
- Swallowing

## Speech & Communication Challenges

- Low volume voice (hypophonia)
- Monotone or reduced pitch variation
- Slurred or unclear speech (dysarthria)
- Word-finding or language difficulties
- Social withdrawal due to communication difficulties

#### **Therapy Approaches: Speech**

- Lee Silverman Voice Treatment (LSVT LOUD)
- SPEAK OUT! program
- Breath support and vocal exercises
- Strategies for slowing speed and improving clarity
- Use of communication devices when needed

#### Possible Cognitive Challenges

A mild cognitive decline occurs in 20-50% of those with Parkinson's

- Attention
- Memory
- Executive Functions
- Processing Speed

#### **Therapy Approaches: Cognition**

- Cognitive-Linguistic Assessments
- Cognitive-Linguistic Exercises and Practice
- Compensatory Strategies

# Swallowing Challenges (Dysphagia)

- Difficulty chewing and controlling food
- Risk of aspiration (food/liquid entering airway)
  - Can either be "silent" or present as coughing/choking, throat-clearing, or changes in vocal quality
- Aspiration pneumonia
- Malnutrition and dehydration risk
- Drooling and saliva management
  - Decreased swallow frequency/ oropharyngeal bradykinesia

## Therapy Approaches: Swallowing

- Training on safe swallow strategies (chin tuck, double swallow, effortful swallows, pacing, etc.)
- Instrumental swallow evaluation needed to confirm what strategies work and what diet is safest
  - Examples: MBSS or FEES
- Exercises to treat the swallow (respiratory muscle strength training like EMST, swallow strengthening exercises, LSVT)
- Modified diet textures and liquid thickness as needed
- Education for families/caregivers to assist with strategies + signs to look for
- Drooling: Chewing gum, cues to swallow, upright head posture, lip strengthening exercises, and/or medical intervention.

### Challenges in Communication, Cognition, and Swallowing will Present Differently in Every Person with Parkinson's!!

- -There may be seasons where illness causes symptoms to "flare up" and seasons where the symptoms present more mild
- -Speech therapy is a great resource to assess all of these areas to determine what "barriers" can be addressed to maximize independence in daily life
- -An SLP can provide you with exercises and strategies to improve or maintain your way of communicating, thinking through daily tasks and eating/drinking your favorite things.
- \*Speech therapy is NOT "one size fits all"!! It is meant to be personalized and modified based off of the individual's needs and what they desire to improve. Therapy may focus on quality of life vs. safety- based off what the person with Parkinson's and their families goals are.

"Acceptance doesn't mean resignation; it means understanding that something is what it is and that there's got to be a way through it."

- Michael J. Fox

Speech therapy is a way to guide you or your loved one THROUGH the changes in communication, cognition, and swallowing that may arise in life with Parkinson's.