

# Speech & Swallowing Issues



People with Parkinson's disease (PD) may notice changes or difficulty in speaking or swallowing. These changes can happen at any time but tend to increase as PD progresses. Just as PD affects movement in other parts of the body, it also affects the muscles in the face, mouth and throat involved in speaking and swallowing.

# Speech Issues

Clear speech requires adequate breath support (respiration), closure of the vocal folds in the voice box (phonation), and precise movements of tongue and throat muscles (articulation & resonance). PD can impact these systems, resulting in speech that is soft and difficult to understand.

Beyond voice clarity and volume issues, PD <u>symptoms</u> like a frozen or <u>masked face</u> can make it harder to communicate the emotions that go along with what you are saying. Others may misinterpret this as a lack of interest in the conversation, aloofness or even as depression or anger.

Some people with PD may also struggle to find words, and so they may speak slowly. In other cases, PD causes people to speed up their speech, so much so that it may sound like stuttering. The person with Parkinson's may not always notice these symptoms, which also tend to worsen with fatigue.

# **Dysphagia & Aspiration**

Speech and swallowing changes often occur together in Parkinson's.

**Dysphagia** is the term used for swallowing difficulty. It usually starts mildly with issues such as taking a longer time to eat a meal or coughing at mealtimes. It can progress over time to become a critical PD symptom. Importantly, dysphagia can lead to malnutrition, dehydration and aspiration (when food or liquid "goes down the wrong pipe").

**Aspiration**, which can be silent (a person does not cough or choke), is a risk factor for aspiration pneumonia — the leading cause of death in PD. Additionally, discomfort during swallowing or not being able to eat and drink the things you enjoy can lead to a decreased quality of life.

Answer the below questions to help you figure out if you have a speech, voice or swallowing problem. If many of these statements apply to you, visit a **speech-language pathologist** (SLP) – https://www.parkinson.org/understanding-parkinsons/non-movement-symptoms/speech-swallowing

especially if these changes begin to limit your quality of life.

# How do I know if I have a speech or voice problem?

- My voice makes it difficult for people to hear me.
- People have difficulty understanding me in a noisy room.
- My voice issues limit my personal and social life.
- I feel left out of conversations because of my voice.
- I cannot participate in telephone calls because of my voice.
- My voice problem causes me to lose income.
- I have to strain to project my voice.
- My voice clarity is unpredictable.
- My voice problem upsets me.
- My voice makes me feel handicapped.
- People ask, "What's wrong with your voice?"

## How are speech problems treated?

Although adjusting Parkinson's medications may help with speech issues, working with a speech-language pathologist (SLP) is the gold-standard treatment. SLPs are trained health care professionals who specialize in evaluating and treating people with voice, speech, swallowing, language and cognitive (thinking) challenges.

Speech evaluation and therapy in early stages of PD — even before changes are noticeable — can make a big difference in preventing more serious issues later on. An SLP will perform an evaluation and personalize strategies and exercises for you. Communication devices, particularly those that amplify the voice, are sometimes used to improve communication. In

Ask your doctor for a referral to a speech-language pathologist. Also contact your health insurance company to find out what therapy and procedures are eligible for reimbursement and to find a list of SLPs covered by your plan.

There are also Parkinson's-specific programs led by certified speech-language pathologists. Lee Silverman Voice Treatment (LSVT) and the Parkinson Voice Project SPEAK OUT! are two evidence-based programs available throughout the U.S. and abroad. Call the Parkinson's Foundation Helpline at 1-800-4PD-INFO (1-800-473-4636) for help locating a speech-language pathologist or a program near you.

### The Lee Silverman Voice Treatment

The Lee Silverman Voice Treatment (LSVT) LOUD is an evidence-based, intensive speech therapy method for people living with Parkinson's disease and other neurological conditions. Treatment is designed to help people with PD relearn the habit of using a louder voice and clearer speech by strengthening the muscles used to produce voice and speech. Treatment consists of:

- Four, one-on-one speech therapy sessions a week for four consecutive weeks
- Daily home practice on therapy days and non-therapy days
- Ongoing daily home practice after initial treatment to maintain speech improvements

A speech-language pathologist who has been certified in LSVT delivers the treatment. For more information about LSVT or to find an LSVT-certified provider, visit **www.lsvtglobal.com** or call 888-438-5788.

### Parkinson Voice Project SPEAK OUT!

SPEAK OUT! is an evidence-based speech therapy approach developed by Parkinson Voice Project. The program is designed to help people with Parkinson's strengthen the muscles used for speaking and swallowing and to speak with intent. Treatment consists

of:

- Eight to 12 speech therapy sessions
- Daily home practice using a SPEAK OUT! Workbook
- Speech and singing groups
- Re-evaluation every six months

A speech-language pathologist who has been certified in SPEAK OUT! delivers the treatment. For more information about SPEAK OUT! or to find a SPEAK OUT! provider, visit www.parkinsonvoiceproject.org or call 833-375-6500.

### **Vocal Fold Injections**

Vocal fold injections have been used to treat voice quality and loudness in PD. The purpose of these injections is to build up vocal folds that do not close completely while talking. The procedure involves injecting natural or synthetic materials directly into the vocal folds to improve the voice, specifically loudness and quality. The effect typically lasts about three to six months, though sometimes longer. Injections can be repeated.

The research on the effectiveness of vocal fold injections is preliminary and ongoing. An ear, nose and throat (ENT) specialist performs this procedure and can help you understand if you are a candidate for this treatment.

### **Assistive Communication Devices**

If you are experiencing problems with voice loudness and speech clarity, consider the following strategies to improve your communication:

- Personal amplification devices can increase the loudness of your voice. They are portable and often rechargeable.
- Alternative communication devices, ranging from printable communication boards to computer technology, can help you clearly express yourself.

Request an evaluation with a speech language pathologist to investigate your areas of

concern and develop a plan for maximizing your communication success.

## Tips for Coping with Speech Difficulties

- Exercise your voice by reading out loud or singing every day.
- Drink enough water, avoid shouting and rest your voice when it is tired.
- Train your voice like an actor—sit and stand with good posture, do exercises for articulation, breathing and projecting the voice.
- Get feedback from friends and family members about how others perceive your speech — develop a cue or code word you can use in public to make you focus on speaking clearly.
- If you have soft speech, use tools such as a voice amplifier (microphone), placed on your shirt, and on the telephone (this device may help with soft speech, but not for mumbling/stuttering speech).
- Make eye contact with the person to whom you are speaking.
- Reduce background noise.
- Socialize in small groups or one-on-one.
- If you experience a facial masking, use "feeling" words to communicate your emotions ("I feel happy, sad, excited," or "I agree"). Practice using physical gestures to help convey emotions.
- Determine which times of day your speech is best. Plan social engagements around those times.
- Ensure that the people you are communicating with wear their glasses and hearing aids, as necessary.
- If you participate in speech therapy, bring your loved ones to a couple of sessions so they can learn how to best understand your speech and communicate with you. Communication is a two-way street!
- Use video calls instead of phone calls to communicate.

## **Tips for Speaking Louder**

Even in the early stages of PD, many report that their voices are too soft, causing others to ask them to repeat themselves. Other people with PD may have a gruff or hoarse quality to their voice. Try these strategies:

- Take a breath before you start to speak.
- Pause between phrases to take in another breath.
- Express your ideas in short, concise sentences.
- Speak louder than you think is necessary.
- Do not shout over noise when you talk.
- Rest your voice when it is tired.
- Reduce throat clearing or coughing. Try a hard swallow.
- Reduce or eliminate heartburn.
- If the air is dry in your home, use a humidifier.

# **Swallowing Issues**

# How do I know if I have a swallowing problem?

- I have recently lost weight without trying.
- I tend to avoid drinking liquids.
- I get the sensation of food being stuck in my throat.
- I tend to drool.
- I notice food collecting around my gum line.
- I tend to cough or choke before, during or after eating or drinking.

- I often have heartburn or a sore throat.
- I have trouble keeping food or liquid in my mouth.

### How are swallowing problems treated?

The first step to addressing swallowing issues is to speak to a neurologist about getting an evaluation performed by an SLP. This professional will take a medical history and interview the person with PD about eating and swallowing.

This is typically followed by a video X-ray/ modified barium swallow test so the medical specialist can observe the swallowing process as an individual sips liquid and eats food and these substances flow from the mouth, down the throat and esophagus, to the stomach. In some cases, it is necessary to have an endoscopic examination performed by a gastrointestinal doctor if a cause of dysphagia other than PD (such as a narrowing or stricture in the esophagus) is suspected. With these tests it is possible to see where the trouble is occurring and to recommend therapies.

Follow the recommendations of the swallowing specialist, which may include the following:

### Exercise and Swallow Hard

Just as exercise can ease other PD-related movement difficulties, it can also help with swallowing. The **Lee Silverman Voice Technique**® (LSVT®) helps a person exaggerate speaking and swallowing. Working with an SLP on an individualized program helps the person to swallow hard and move food from the mouth down the throat.

### **Expiratory Muscle Strength Training**

This therapy strengthens respiratory muscles, improves cough and swallowing and reduces aspiration.

### Change in Food

Modifying liquids and solids can help. For people who cannot prevent liquids from getting into their airway, liquids may need thickening. Taking bigger or smaller bites or sips or pureeing solid foods may help. First get an evaluation, so the SLP can recommend how to modify food and liquid to your abilities.

### **Focus**

Make eating and drinking your only focus at mealtimes. Being distracted by conversation or other entertainment can prevent a person with PD from focusing on safe swallowing.

#### MY PD STORY: HEATHER WOLYNIC

"I noticed I was often off balance, my speech became impaired and my memory was awful. There were times during teaching when my speech would slur, and I would forget everything prepared in my lesson plan."

#### READ HEATHER'S STORY >

Additionally, people with PD tend to swallow less often and less completely. As a result, 70% have too much saliva, which often pools in their mouth. Sucking on hard candy, preferably sugarless, can stimulate swallowing and provide temporary relief from drooling. An effective treatment, available by prescription, is atropine eye drops taken orally.

Adjusting anti-PD medications may also make it easier to swallow. In addition, medical conditions unrelated to PD can lead to difficulty swallowing.

Page reviewed by Dr. Addie Patterson, Movement Disorders Neurologist at the Norman Fixel Institute for Neurological Diseases at the University of Florida, a Parkinson's Foundation Center of Excellence, and Corinne Jones, PhD, CCC-SLP, Assistant Professor at The University of Texas

# Parkinson's Foundation Helpline

Contact 1-800-4PD-INFO or Helpline@Parkinson.org for answers to your Parkinson's questions.

LEARN MORE >

FL: 200 SE 1st Street, Ste 800, Miami, FL 33131, USA

NY: 1359 Broadway, Ste 1509, New York, NY 10018, USA

Call our Helpline: 1-800-4PD-INFO (473-4636)

© 2023 Parkinson's Foundation | The Parkinson's Foundation is a 501(c)(3) nonprofit organization. EIN: 13-1866796

contact@parkinson.org