



OVERCOMING VOCAL CHALLENGES, DROOLING, AND EATING

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OBJECTIVES

- LEARN ABOUT SPEECH AND VOICE CHALLENGES IN PD
- LEARN ABOUT SALIVA CONTROL ISSUES AND SWALLOWING PROBLEMS IN PD
- LEARN STRATEGIES TO HELP IMPROVE OR MANAGE SPEECH, VOICE, DROOLING AND SWALLOWING/EATING DIFFICULTIES.

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

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

DROOLING

- DROOLING IS REPORTED FREQUENTLY IN PD. PUBLISHED STUDIES ESTIMATE THE PREVALENCE FROM 30-74%. PREVALENCE RATES WERE LOWER IN Milder PD (KALF, ET.AL. 2009)
- EXCESSIVE DROOLING, ALSO KNOWN AS SIALORRHEA, IS A COMMON SYMPTOM IN PD.
- THE DROOLING IS TYPICALLY CAUSED BY THE COMBINATION OF POOLING OF SALIVA IN THE MOUTH CAUSED BY DECREASED SWALLOWING FREQUENCY, INCOMPLETE SWALLOWS, DIMINISHED LIP CLOSURE, OR HEAD DOWN POSTURE (LIKE IN ADVANCED PD)
- WHEN SEVERE, IT MAY INDICATE A MORE SERIOUS SWALLOWING PROBLEM.

DYSPHAGIA

- 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, DIFFICULTY CHEWING, COUGHING/THROAT CLEARING DURING OR AFTER SWALLOWING, C/O FOOD “GETTING STUCK”, WEIGHT LOSS
 - DYSPHAGIA CAN LEAD TO MALNUTRITION, DEHYDRATION, OR ASPIRATION.

MODIFIED BARIUM SWALLOW STUDY (MBS)


VIDEO SOURCE: [HTTPS://WWW.YOUTUBE.COM/WATCH?V=FQG0QMLAFMS](https://www.youtube.com/watch?v=FQG0QMLAFMS) ; DR. IANESSA HUMBERT



SO, WHAT
CAN YOU
DO?

Talk to your MD or NP about the problems you are experiencing.

You will be referred for A consult to a speech-language pathologist.

The background of the slide is a solid blue color. In the top-left and bottom-right corners, there are several realistic-looking water droplets of various sizes, some overlapping the blue background and others appearing to be on a surface. The droplets have highlights and shadows, giving them a three-dimensional appearance.

SPEECH AND VOICE EVALUATION

- ORAL MECHANISM EXAMINATION
- SPEECH SOUND PRODUCTION ASSESSMENT
- ACOUSTIC MEASUREMENTS FOR VOICE
- READING PASSAGES
- STIMULABILITY TESTING
- ENT CONSULT

SWALLOWING EVALUATION

- CLINICAL EVALUATION
 - > INTERVIEW, HISTORY, MEDICAL STATUS
 - > ORAL MOTOR EXAM
 - > FOOD/LIQUID TRIALS
 - > YALE SWALLOW PROTOCOL (3 OZ WATER CHALLENGE)

EAT-10

1. My swallowing problem has caused me to lose weight
2. My swallowing problem interferes with my ability to go out for meals.
3. Swallowing liquids takes extra effort.
4. Swallowing solids takes extra effort.
5. Swallowing pills takes extra effort.
6. Swallowing is painful.
7. The pleasure of eating is affected by my swallowing.
8. When I swallow food sticks in my throat.
9. I cough when I eat.
10. Swallowing is stressful.

SWALLOWING EVALUATION

- OBJECTIVE/INSTRUMENTAL EVALUATION
 - > MODIFIED BARIUM SWALLOW STUDY (MBSS) OR VIDEOFLUOROSCOPIC SWALLOW STUDY (VFSS)
 - > FLEXIBLE ENDOSCOPIC EVALUATION OF SWALLOWING (FEES)
- GI CONSULT MAY BE REQUIRED IF THERE ARE S/S ESOPHAGEAL DYSPHAGIA

SPEECH/VOICE/SWALLOWING THERAPY

- TO IMPROVE SPEECH/VOICE: YOU MUST SPEAK AND USE YOUR VOICE!
 - LEE SILVERMAN VOICE TREATMENT (LSVT): LOUD
 - SPEAK OUT! : SPEAK WITH INTENT

- TO IMPROVE YOUR SWALLOWING: YOU MUST SWALLOW!
 - SQUEEZE HARDER
 - SWALLOW FASTER
 - IMPROVE LINGUAL MOBILITY AND STRENGTH
 - IMPROVE COUGH EFFICIENCY

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

STRATEGIES FOR VOICE

- BREATHING EXERCISES
- VOCAL HYGIENE STRATEGIES
- VOICE EXERCISES (AS PRESCRIBED BY THE SLP)
LIKE HUMMING, SUSTAINED /AH/, PITCH GLIDES,
INCREASING/DECREASING LOUDNESS
- READING PASSAGES OUT LOUD USING EASY
ONSET
- LEE SILVERMAN VOICE TREATMENT (LSVT)
- SPEAK OUT!

STRATEGIES FOR DROOLING

- **BEHAVIORAL TREATMENT WITH ST**

- > SWALLOWING SALIVA BEFORE STARTING TO SPEAK

- > IMPROVING LIP SEAL THROUGH EXERCISES

- > IMPROVING POSTURE

- **MEDICAL MANAGEMENT**

- > ANTICHOLINERGIC MEDICATIONS

- > BOTOX INJECTIONS

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

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- 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
WWW.SWALLOWINGDISORDERFOUNDATION.COM
- AMERICAN SPEECH-LANGUAGE HEARING ASSOCIATION
WWW.ASHA.ORG
- PARKINSON'S FOUNDATION WWW.PARKINSON.ORG
- CLEVELAND CLINIC WWW.MYCLEVELANDCLINIC.ORG
- LEE SILVERMAN VOICE TREATMENT
WWW.LSVTGLOBAL.COM
- PARKINSON VOICE PROJECT
WWW.PARKINSONVOICEPROJECT.ORG

The image features two vibrant red ceramic mugs filled with a dark coffee, positioned on a dark, textured surface that resembles a piece of fabric or a blanket. The background is dark and moody, with several clear, glistening water droplets of various sizes scattered across the scene, particularly in the upper left and lower right areas. The overall atmosphere is warm and cozy. The text "THANK YOU!" is centered in a clean, white, sans-serif font.

THANK YOU!