



**Stronger together!**

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**European Conference on Huntingtons Disease**

*Nutrition, eating and swallowing –  
needs, challenges and solutions Workshop*

# ***SWALLOWING DIFFICULTIES IN HD***

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# The role of Speech Pathologist in HD

## Multidisciplinary TEAM working

### Huntington's disease

- Swallow - dysphagia
- Speech and Voice - dysarthria
- Language and Communication
- Cognition

# Dysphagia

## Swallowing difficulties (Dysphagia):

difficulty passing food or liquid from the mouth to the stomach.

- It is a **common** problem in Huntington's disease
- It can occur since the **early stages**
- It gets worse as the disease **progresses**
- It is influenced by the movement, cognitive and behavioral problems
- It raises the risks of **aspiration pneumonia, airway obstruction, dehydration and malnutrition**

# Normal Swallowing phases

## PRE-ORAL and ORAL phase

Looking at the food  
Salivating  
Using utensils  
Putting food into the mouth  
Chewing  
Bolus formation



## PHARYNGEAL phase

Swallow reflex  
Closure of the Larynx  
Move food to esophagus



## ESOPHAGEAL phase

Food to stomach

## Common difficulties in HD

- Inattention to the task of eating (distracted by TV or other activities)
- Impulsivity
- Difficulty controlling amount of food or liquid intake
- Tachyphagia (excessively rapid eating)
- Postural instability and Hyperextension of neck and trunk
- Difficulty in handling cutlery and cups

- Poor oral coordination of tongue and lips
- Poor lip closure
- Facial/lingual chorea
- Drooling or dry mouth
- Incomplete chewing
- Difficult moving food to the back of mouth
- Holding food or liquids for long time prior to swallow initiation

## Common difficulties in HD

- Incomplete swallowing-leaving food residue
- Incoordination of swallowing and breathing
- Talking while eating/Involuntary phonation during swallowing
- Laryngeal chorea
- Delayed and repetitive swallow
- Prolonged laryngeal elevation
- Penetration or aspiration of food or liquids (cough, throat clearing, change in voice quality)
- Silent aspiration (no cough)
- Choking

# Signs you might need to contact a SLP

**Earlier the better-before there is a problem to establish a plan as disease progresses**

- Collection of food at the side or on the roof of the mouth
- Spitting food out of the mouth
- Regurgitation of material through mouth or nose
- Frequent throat clearing
- Wet voice quality after swallowing
- Coughing (during or after meals, when not eating – saliva)
- Choking
- Changes in dietary habits (difficulty with different food textures or liquids)
- Weight loss
- Recurrent episodes of pneumonia

# Swallowing Assessment

Patient and Caregiver Interview

Communication status

Nutrition and hydration status

Effects of behavior and cognitive status/factors

Alertness levels

Ability to participate and co-operate

## Clinical Swallowing Evaluation

Oro-facial examination (cranial nerve assessment, motor skills...)

Voice and Cough Strength

Articulator Agility (tongue, lips...)

Respiratory status and Posture

Saliva management (spontaneous swallow)

Oral hygiene

Liquid and food trials

**Mealtime observation** (if possible)

## Instrumental Swallowing Assessment

Videofluoroscopic swallowing study (VFSS)

Fiberoptic endoscopic evaluation of swallowing (FEES)



# Management of dysphagia in HD

Maximizing **Safety** and **Quality of Life**

**Tailored therapy to individual patient characteristics!**

## Environment

- Eat in a relaxed comfortable environment
- Keep mealtimes predictable (same times, similar situations)
- Reduce distractions (TV, conversation ect.)
- Maintain an upright position (as near 90 degrees as possible) with head support if needed, during and after eating (30-45 min)
- Never administer fluids, solids or medications while the person is lying down or in a reclining position

## Mealtime Equipment/Utensils

- Double-handed cup or dysphagic mug
- Weighted utensils or hand strap or grip cutlery
- Plastic dishes with rims
- DO NOT drink with a straw (unless specifically advised by your therapist)

# Management of dysphagia in HD

## Pacing and Feeding Strategies

- Cough every few bites to remove residue, if needed
- Do not introduce more food into the person's mouth until the previous mouthful has been swallowed
- Take a small amount of food and place it into the person's mouth
- Sip water throughout day to initiate a swallow (to control excess saliva)
- At the end of the meal, check the inside of the cheek for any food that may have been pocketed

## Postural/Position Techniques

Postural strategies are used to help change the way bolus flows through the swallowing mechanism (identified by the SLP during clinical and instrumental evaluations).

## Swallowing Maneuvers

They are used to change the swallow physiology (identified by the SLP during clinical and instrumental evaluations).

# Management of dysphagia in HD

## Sensory Stimulation

Thermal-tactile stimulation applied to the tongue, around the mouth, and/or in the oropharynx.

## Oral-Motor Therapy

To improve the range of motion of the lips, tongue, and jaw, to improve coordination, to improve vocal fold adduction, laryngeal elevation, or tongue base retraction.

## Oral care/Oral Hygiene

Oral hygiene and dental care are **important**. Secretions that accumulate on the tongue and palate reduce oral sensitivity and promote bacterial growth – risk factor for pneumonia (swallow of saliva continues also during artificial tube feeding).

## Diet modification

Alterations to the consistency of foods and/ or liquids based on the dysphagia level.

# Diet Restrictions, Modifications, Recommendations

## Food to avoid !

Food with poor consistency (e.g. biscuits)

Vegetables or fruit with skins difficult to be removed with the tongue

Small, coarse and hard foods (peanuts, fruit seeds ect.)

Over-spiced food

Fish with bones unless filleted completely

Tough or stringy cuts of meat

Shredded vegetables like carrots and lettuce

Mixing food textures (e.g., rice soup)

If required, **liquids** should be altered with thickener (thin, nectar thick, honey thick, pudding thick) or it may be altered how they are swallowed (i.e., use of teaspoon)

# Diet Restrictions, Modifications, Recommendations

## Texture modified diet

(according to International Dysphagia Diet Standardisation Initiative -IDDSI)

- **Soft & Bite-sized:** soft foods that requires some chewing
- **Minced & Moist:** tiny pieces of food that requires minimal chewing
- **Pureed:** no chewing is required

Add oil and sauces to make food more viscous

Always adjust caloric intake and nutritional composition of the texture modified diet with a Nutritionist

**Difficulty swallowing medications** (pills, tablet...): identify with the physician alternative formulation (e.g. liquid)/routes of administration, or if it is possible to alter the solid drug

## References

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- Heemskerk, A. W., & Roos, R. A. (2011). Dysphagia in Huntington's disease: a review. *Dysphagia*, 26(1), 62-66.