Identification of Oropharyngeal Dysphagia in the Geriatric Patient

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A few definitions....

- **Dysphagia**: difficulty swallowing
  - **Oropharyngeal dysphagia**: swallowing impairment resulting from difficulty in the mouth or pharynx (Speech Pathology)
  - **Esophageal dysphagia**: swallowing impairment resulting from a problem involving the esophagus (Usually Gastroenterology)
  - **Odynaphagia**: Pain with swallowing (Typically ENT or Gastroenterology)

- **Aspiration**: the passage of material below the vocal cords into the trachea
- **“Silent” aspiration**: No reflexive cough response with aspiration
Dysphagia or No Dysphagia, that is the question...

NORMAL SWALLOW

y&first=1
Aspiration

https://i.ytimg.com/vi/Vo5M3A8q1IU/maxresdefault.jpg
Who’s at risk?

▪ **PATIENTS WITH NEURO IN Volvement**
  
▪ Dysphagia is most prevalent in the Neuro population.

▪ The reported incidence of dysphagia in Stroke patients varies, generally ranging between 64%-78% when instrumental testing is utilized.

▪ The most common cause of death in patients sustaining acute stroke is bacterial pneumonia believed to result from *increased incidence of aspiration*.

▪ High incidence of dysphagia also occurs in head injury and neurodegenerative disease such as Parkinson’s Disease, MS, and ALS.

▪ But neuro involvement is not necessary for an individual to be dysphagic....
Who’s at risk? (cont.)

- Pt.s with difficulty coordinating respiration/swallowing (i.e. COPD)
- Deconditioned patients (i.e. post-surgical, chronic conditions)
- Tracheostomized and/or Ventilator-dependent patients
- Head and Neck Cancer patients
Role of the Speech Pathology

Once consulted:

- Performs thorough review of the medical record
- Conducts Patient/Caregiver/Nursing interview whenever possible
- Performs a Clinical Swallowing Evaluation (If does well, recommend diet)
- If clinical signs of aspiration are observed, typically one of two instrumental swallowing evaluations are performed to evaluate swallowing function
  - Videoflourographic Swallowing Evaluation (VSE) in Radiology
  - Flexible Endoscopic Evaluation of Swallowing (FEES) at bedside
- Results of instrumental evaluation (coupled with patient’s personalized needs/wishes) determine diet recommendation
Instrumental Swallowing Evaluation

VIDEOFLUOROGRAPHIC SWALLOW EVALUATION (VSE)

FLEXIBLE ENDOSCOPI EVALUATION OF SWALLOWING (FEES)
Speech has to be involved to help

- Nursing and other professionals are often our first line of defense in identification of geriatric patients with dysphagia

- What can YOU look for?
  - **Coughing** after administration of meds/during meals
  - **Throat clearing** after administration of meds/during meals
  - **Wet voice** at baseline and/or after eating/drinking
  - **Dysphonia/aphonia** (very hoarse or breathy vocal quality)
  - **Pocketing** of food/liquid in the oral cavity
  - **High respiratory rate** (< 30 breaths/minute) during meals
  - **Inability to swallow saliva** well without suctioning
  - **Tracheostomy**
  - Increased **chest congestion after meals**
  - **Complaints** of difficulty swallowing by the patient
“He’s got a good cough!”

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Common misconceptions

- Consulting Speech for solid food dysphagia/feeling of food “getting stuck” (start with the esophagus, i.e. Barium Swallow study or GI consult)
- Consulting when someone WON’T eat secondary motivation/lack of desire to eat
- Consulting when someone cannot keep food down
- Chin tuck will prevent aspiration in all situations (“He’s ok...I just have him tuck his chin”)
- Thick liquid is always safer
- Straw use is always less safe
- Coughing when taking meds/eating is ok as long as it’s a “good cough”
- If a patient has difficulty swallowing, ALL meds should be crushed/ground
It takes a village....

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Hearing Loss: What You Need To Know

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Statistics

- More than 37.5 million adults have hearing loss.
  - About 15% of the US population

- Age is the strongest predictor of hearing loss.

- Less than 30% of those who would benefit from hearing aids, are actually using them.
Auditory Pathway: How we hear
How to Interpret an Audiogram

- We measure hearing by pitch and by volume.
- The blue line or “X” represents the L ear.
- The red line or “O” represents the R ear.
- The lower the line, the more severe the hearing loss is.
The Speech Banana

• The "banana" is the volume and pitch range of speech at a normal conversational level.
• The person is able to hear anything below their threshold line (blue and red lines).
• With speech sounds, lower pitches provide volume, while higher pitches provide clarity.
Causes of Hearing Loss

Conductive
- Fluid
- Allergies
- Foreign Objects
- Ruptured Eardrum
- Impacted Ear Wax

Sensorineural
- Aging
- Ototoxicity
- Loud noise
- Virus, Disease, or Infection
- Head Trauma
- Blast/Explosion
- Tumors
Sensorineural Hearing Loss

Sensory = cochlea AND/OR Neural = nerve pathway

Attenuation
• Sounds must be louder in order to be heard (detected)

Distortion
• Changes the way sound is encoded

Who is driving you to the VA?

He’s getting in the way?
Louder **does not** always equal clearer
Hearing Loss Impact

- Emotional
  - Frustration, anxiety, depression

- Social
  - Desire to withdraw or become isolated

- Health
  - Contributions to cognitive decline and disease
    - Processing, attention, memory

Hearing aids (or assistive listening devices) have been shown to improve quality of life in older adults.
What can you do?

Communication breakdowns in health care can lead to serious medical errors.

1. Utilize available technology
2. Practice good communication strategies
3. Refer for diagnostic audiologic evaluation
Hearing Aids and Listening Devices

• Hearing aids amplify sound and are programmed based on their hearing loss.
  • If your patient has hearing aids, encourage them to use them!
  • These are helpful, however do not return hearing to normal!

• Pocket talkers also amplify sound.
  • These are less fine-tuned than hearing aids.
  • Good for emergency situations for people without hearing aids!
Communication Strategies

• Be patient!
• Get their attention before speaking.
• Make sure the listener can see you and your face.
• Speak at a normal rate or a little slower.
• If needed, speak louder - but DO NOT shout.
• If asked, wear a microphone.
• DO NOT exclude the patient from the conversation!
• Ask them to confirm what you said.
• Rephrase the message in less words.
• Provide visual cues or written information.
Remember Our Friend DEAN

**Distance**
- Stand within 3-6 feet of them

**Echoes**
- Adjust the room to eliminate an echo.

**Angles**
- Do not stand behind or directly on their side.

**Noise**
- Reduce the noise in the room
Audiology Services Offered Here

- Services offered
  - Hearing evaluations
  - Hearing aid selections/fitting
  - Assistive listening devices (can be used for inpatients)
  - Vestibular evaluations
  - Tinnitus evaluations and counseling
  - Aural rehabilitation
  - Cochlear implant evaluations and services

- For inpatients who have significant difficulty communicating but do NOT have hearing aids, please contact Audiology. We have assistive listening devices that may be able to assist with communication.
Referrals

Inpatient referrals

• Ototoxic monitoring (oncology patients especially)
• Inpatients often have other, more concerning issues at hand. Hearing may not take priority at this time.
• Accommodations: we can support patients who are mobile and in wheel chairs, however our testing booths cannot fit stretchers

If a patient is interested in seeing Audiology but is unable to be seen as an inpatient, we are a **DIRECT ACCESS** clinic. Patients are able to contact us directly and schedule routine appointments (for a hearing test, if interested in hearing aids, etc.)

Please perform otoscopy prior to referring patients to Audiology – ears should be free of cerumen in order to perform accurate testing

• If patient is on blood thinners please have ears cleaned by physician (PCP, or ENT)
Questions?
References- Oropharyngeal Dysphagia


Pictures:

https://www.bing.com/images/search?view=detailV2&ccid=0oFX4JB5&id=A166CBDD1ED0A76F573A856F788CEA2289C98B32&thid=OIP.0oFX4JB5Ak2WktXcXixuTQHiCB&q=dysphagia+images&simid=607988962271234205&selectedindex=70&mode=overlay&first=1 Normal Swallowing

https://i.ytimg.com/vi/VoSMA2Anq3U/maxresdefault.jpg Aspiration

https://www.bing.com/images/search?view=detailV2&ccid=VZho15wS&id=E0DE24FCBA82BE760C396E8B673123CD996B0AA5&thid=OIP.VZho15ws4tufGPXtmuaGyAEWDq&q=videofluoroscopic+swallow+study&simid=607987501991266485&selectedindex=7&ajaxhist=0 Videofluorographic Swallowing Evaluation

https://www.bing.com/images/search?view=detailV2&ccid=H2yix6Mm&id=1A4A58CCE0EA468690A69E8E41C39C252502FB82&thid=OIP.H2yix6MmultApbvre2brA0JCK&q=fiberoptic+endoscopic+swallow&simid=608015883128144619&selectedindex=24&mode=overlay&first=1 Flexible Endoscopic Evaluation of Swallowing

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References- Hearing Loss


Pictures:
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- https://assets.classy.org/9486612/c864f6f0-4f33-11e9-a19a-0a97e5d08a74.png