



**Stanford**  
MEDICINE

Otolaryngology–  
Head & Neck Surgery



# What is Muscle Tension Dysphagia?

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# Case Study – “Dan”

- 28 y/o male referred by PCP
- 8 months of progressive dysphagia after a URI
- Symptoms:
  - Solids sticking in the back of his mouth
  - Feels as if he “cannot swallow”
  - Describes swallowing as effortful
- Current diet: puree and thin liquids
- 25-35 lbs weight loss since onset
- No pneumonia



# Work Up

- TNE and EGD: WNL
- Questionnaires:
  - EAT 10: 35/40
  - VHI 10: 0/40
- Laryngostroboscopy: WNL, supraglottic compression during phonation
- MBSS...

DR  
ID: 787317  
DOB: 07/1990

Female Jul  
Name MS  
DOB



Eight 2  
Went 10/10

# What Now?

- Normal work up revealing no organic etiology for swallowing issues
- But...huge impact of dysphagia symptoms on oral intake and quality of life



Functional dysphagia, swallowing phobia,  
psychogenic dysphagia, somatic dysphagia?



# But there's a problem with these terms...

- They reflect the lack of mechanistic understanding and clear etiology
- As a result, receiving care is difficult
  - No clear disciplinary home
  - No standards of care and guidelines
  - Patients feel dismissed and distance themselves from the label



## Psychogenic Dysphagia and Globus: Reevaluation of 23 Patients (Ravich et al, 1989)

- Documented an explanation for symptoms in 15 patients (65%)
- *“Once attribution of symptoms to psychogenic causes is made, the diagnosis is rarely reconsidered”*



# Muscle Tension Dysphagia (MTDg): Symptomology and Theoretical Framework (Kang 2016)

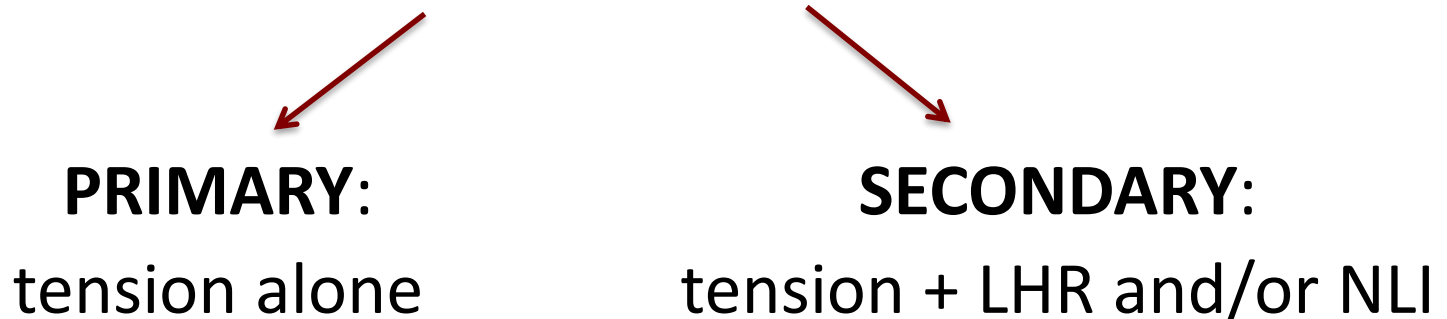
- Case series with chart review
- N = 67
- Common symptoms:
  - Difficulty swallowing solids (37%)
  - Throat discomfort with swallowing (33%)
  - Sensation of food sticking in the throat (30%)
- Laryngeal findings:
  - Laryngeal muscle tension (97%)
  - Laryngeal hyperresponsiveness (LHR) 67%
  - Non-specific laryngeal inflammation (NLI) 52%



## Kang et al, 2016

Laryngeal muscle tension may be one of the underlying etiologies in patients with functional dysphagia

*Muscle Tension Dysphagia (MTDg) defined: patients with idiopathic dysphagia complaints, a “normal” VFSS, and evidence of laryngeal hyperfunction on laryngoscopy*



# Prevalence of MTD Among Patients with Functional Dysphagia (Hamdan, 2018)

- 75% of patients with dysphagia symptoms and a normal barium swallow had evidence of laryngeal hyperfunctioning on laryngeal videostroboscopy

*This supports the notion that laryngeal tension may be one of the underlying causes of functional dysphagia*



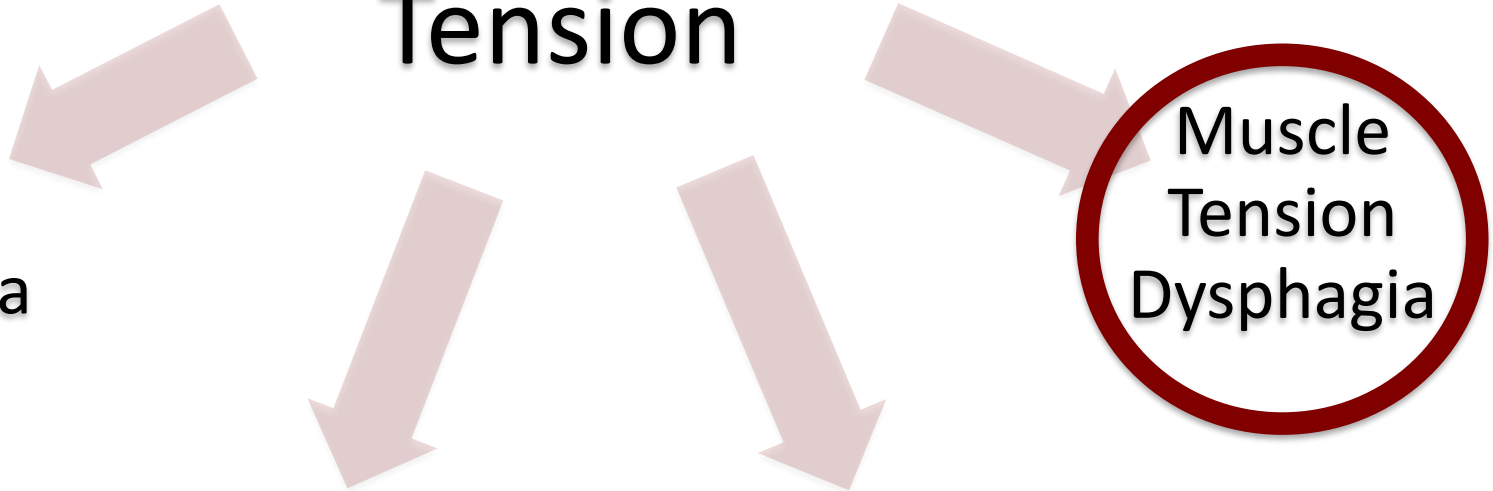
# Laryngeal Muscle Tension

Muscle  
Tension  
Dysphonia

Chronic  
Cough /  
PVFM

Globus  
Pharyngeus

Muscle  
Tension  
Dysphagia



# Treatment, Kang 2016

- 13 patients completed a course of voice therapy
- Treatment consisted of laryngeal unloading tasks
- 100% reported resolution of symptoms
  - However, only a 40% SLP referral rate





# Laryngeal manipulation for dysphagia with muscle tension dysphonia (DePietro, 2018)

- N = 44
- Patients with muscle tension dysphagia received circumlaryngeal massage with an SLP
- 77% reported improvement in symptoms
- Use of additional therapy techniques (RVT, breath work, home throat massage, and tongue stretches) were not significantly associated with improvement in dysphagia symptoms



Clinical take away...though research is limited, how should we manage our muscle tension dysphagia patients?

# Assessment

- Thorough case history
  - Especially of other **LHR symptoms**
- Quality of life measures
- **Laryngoscopy**
- Instrumental swallow assessment
- Gastroenterology testing
- **Laryngeal palpation**
- **Trial voice therapy tasks**



## Back to “Dan” ...

- Treatment consisted of:
  - Education
  - Circumlaryngeal massage
  - Diaphragmatic breathing and relaxed throat breathing
  - Progressive therapeutic PO trials
- Subjective swallowing effort 8/10 → 3/10





# Take Home

- More high quality research is needed
- Diagnostic terms influence how care is provided and how patients perceive their issues. Adopt a physiologic mindset when assessing and treating
- Muscle tension dysphagia (MTDg) is a subset of laryngeal muscle tension issues
- For better screening, include the following into your dysphagia assessment:
  - Laryngoscopy
  - Presence of other LHR symptoms
  - Laryngeal palpation
  - Stimulability to voice therapy techniques

Thank you!!

# References

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