

DEPARTMENT OF OTOLARYNGOLOGY

CENTER FOR VOICE AND SWALLOWING NEWSLETTER

JUNE IS NATIONAL DYSPHAGIA AWARENESS MONTH



On July 27, 2007, the 110th Congress led by U.S Representative from Tennessee Zachary Paul "Zach" Wamp introduced Resolution H.Con.Res.195 which would establish a **National Dysphagia Awareness Month**. On September 27, 2008, the resolution passed and was agreed to in the Senate without amendment and with a preamble by unanimous consent. **The resolution is printed in its entirety on Page 3 of this newsletter.** Please help us celebrate this astonishing accomplishment by raising dysphagia awareness and hope in your community. Our team is commemorating this month by hosting a regional dysphagia conference and by donating to dysphagia research.

14% OF PERSONS WITH DYSPHAGIA MAY DIE WITHIN 2 YEARS

UC Davis Center for Voice & Swallowing data presented at the 99th Annual Meeting of the American Broncho-Esophagological Association suggests that **the two-year mortality of persons with dysphagia undergoing a videofluoroscopic swallow study (VFSS) is 14 percent**. All individuals undergoing a VFSS between 01/01/12 and 06/30/15 were followed historically for two years. 766 persons were followed, 14% of which was dead within the two year study period. Lower BMI, ever smoking status, higher functional oral intake scale, lower UES opening, elevated EAT-10 scores at the time of the study, and elevated penetration aspiration scale scores were significantly associated with mortality in univariate analyses ($p < 0.05$). Logistic regression suggests that older age, ever smoking status, lower BMI, and reduced UES opening are all significantly associated with incident mortality ($p < 0.05$). The data will help provide rationale to funding agencies to help support dysphagia research and may also help identify patients at risk for the most severe consequence of dysphagia - death.



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CAN HOT PEPPER HOLD THE KEY TO CHRONIC COUGH?

Chronic cough, defined as a cough lasting more than 8 weeks, affects up to 20% of the general population. When a patient's cough is refractory to medical management, behavior modification therapy with a speech language pathologist may be implemented to help provide relief. Chronic cough is extremely disabling. Complications include broken ribs, urinary incontinence, conjunctival hemorrhage, social isolation, and depression.

All cough is suppressible to a certain degree and behavioral cough suppression therapy (CST) can help control a patient's cough in the majority of cases. The goal of CST is to increase the reactivity threshold for cough. Common CST techniques include resistive breathing, behavior substitution, and biofeedback. At the Center for Voice and Swallowing, our team employs a variety of tools, including endoscopic feedback and heart rate variability training to increase voluntary cough thresholds and desensitize cough receptors. Capsaicin, a naturally occurring compound extracted from chili pepper, is an ideal tool for inducing cough. Inhaled capsaicin at lower doses is an irritant and triggers cough upon contact with the larynx. Capsaicin delivered in higher doses, however, has an analgesic effect and empiric clinic experience suggests that capsaicin may be utilized to desensitize cough receptors. The strategic desensitization of cough with capsaicin utilized as an adjunct to cough suppression therapy holds great promise for the treatment for persons with highly recalcitrant chronic cough.

- Amanda Fazakerly, MA, CCC-SLP

AHCC MAY BE AN EFFECTIVE TREATMENT FOR HPV

AHCC (active hexose correlated compound) is an all natural extract from certain species of mushroom. Recent data suggests that AHCC may be effective in curing women of cervical HPV infection. AHCC is an all natural, immune-modulating compound with established antiviral properties. The supplement works to support the immune system by increasing the activity of natural killer (NK) cells and killer T-cells, effectively reducing the viral burden in those afflicted with the virus. Preliminary experience with AHCC suggests that the supplement may help promote remission in persons with laryngeal papillomatosis. The supplement is currently being utilized by Center for Voice & Swallowing clinicians as an adjunct to angiolytic laser laryngoscopy at a recommended dose of 3 grams taken by mouth once daily.



H. Con. Res. 195

Agreed to September 27, 2008

**One Hundred Tenth Congress
of the
United States of America**

AT THE SECOND SESSION

*Begun and held at the City of Washington on Thursday,
the third day of January, two thousand and eight*

Whereas dysphagia, or difficulty with swallowing, is a medical dysfunction that affects as many as 15,000,000 Americans;

Whereas the Centers for Disease Control and Prevention has estimated that 1,000,000 people in the United States annually are diagnosed with dysphagia;

Whereas the Agency for Healthcare Research and Quality has estimated that 60,000 Americans die annually from complications associated with dysphagia;

Whereas based on Centers for Disease Control and Prevention mortality data, this is more than the total number of Americans dying from all forms of liver disease, kidney disease, and HIV/ AIDS combined—and nearly as many as those dying from diabetes, the number 6 killer of Americans;

Whereas the most common complication arising from dysphagia is aspiration pneumonia—caused by food or saliva entering the windpipe and into the lungs;

Whereas one in 17 people will develop some form of dysphagia in their lifetime, including 50 to 75 percent of stroke patients and 60 to 75 percent of patients who undergo radiation therapy for head and neck cancer;

Whereas as many as half of all Americans over 60 will experience dysphagia at some point;

Whereas complications due to dysphagia increase health care costs by resultant hospital readmissions, emergency room visits, extended hospital stays, the necessity for long-term institutional care, and the need for expensive respiratory and nutritional support;

Whereas the cost of managing a patient with a feeding tube, which for many has been the primary treatment option for this condition, is reported to average over \$31,000 per patient per year;

Whereas the total annual cost to Medicare just for enteral feeding supplies for outpatients was more than \$670,000,000 in 2003, nearly 6 percent of the total Medicare budget for that year;

Whereas including the monies spent in hospitals, the total cost of dysphagia to the health care system is well over \$1,000,000,000 annually;

Whereas the condition of dysphagia is a vastly underreported condition and not widely understood by the general public; and

Whereas observing June 2008 as National Dysphagia Awareness Month would raise public awareness about dysphagia and the need for early detection and treatment: Now, therefore, be it

Resolved by the House of Representatives (the Senate concurring), That it is the sense of the Congress that a National Dysphagia Awareness Month should be established.



DOWN GOES CATES! DOWN GOES CATES!

In an epic battle of dysphagia heavyweights at the 14th Annual Sin City Laryngology Conference held at the **Magnificent Planet Hollywood Hotel & Casino**, **Greg Postma proved you can teach an old dawg new tricks!** Postma utilized his Machiavellian-like wisdom to lure the young gun into a false sense of security. Cates came out firing his dysphagia knowledge like an old school Tyson Haymaker. The Master was able to weather the storm and lulled the *Chosen One* with his rope-a-dope-like tactics reminiscent of the 1974 Ali-Foreman Rumble in the Jungle. Cates was defeated by TKO in the 7th round. When asked if the two would meet for a rematch in Vegas in 2020, Postma replied, "show me the money!"



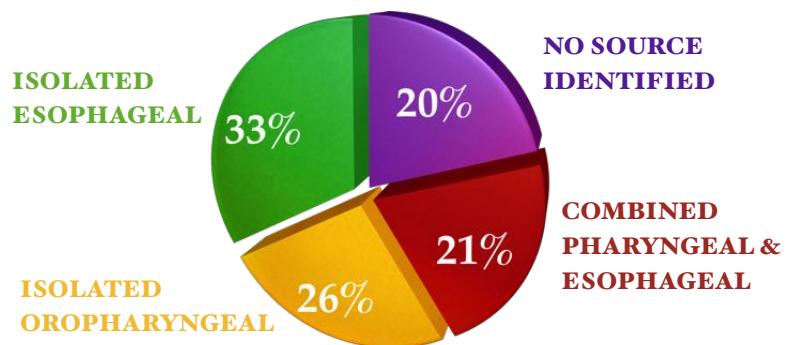
REGARDING DYSPHAGIA SYMPTOMS - PATIENTS CANNOT BE TRUSTED

Center for Voice and Swallowing researchers led by Drs. Brian Cervenka and Maggie Kuhn have evaluated a an individuals ability to accurately identify the site of their dysphagia symptom. A comprehensive review of patients undergoing swallowing fluoroscopy revealed that only 26% of persons reporting cervical dysphagia correctly localized the site of their swallowing complaint. One-third of patients who reported that food gets stuck in the neck actually had an esophageal etiology for their swallowing dysfunction.

In comparison to the sensation of cervical dysphagia, persons localizing the site of obstruction to the chest were more accurate in their assessment. Although far from perfect, 66% of persons with a swallowing complaint below the sternal notch had an esophageal etiology to their swallowing dysfunction. This work was presented at the Annual Meeting of the American Bronchoesophagological Association (ABEA).

These data confirm that patients may inaccurately identify the site of abnormality, and a comprehensive evaluation of swallowing from lips to stomach is required in most persons with the symptom of dysphagia.

- Maggie Kuhn, MD



SITE OF SWALLOWING DYSFUNCTION IN PERSONS REPORTING CERVICAL DYSPHAGIA



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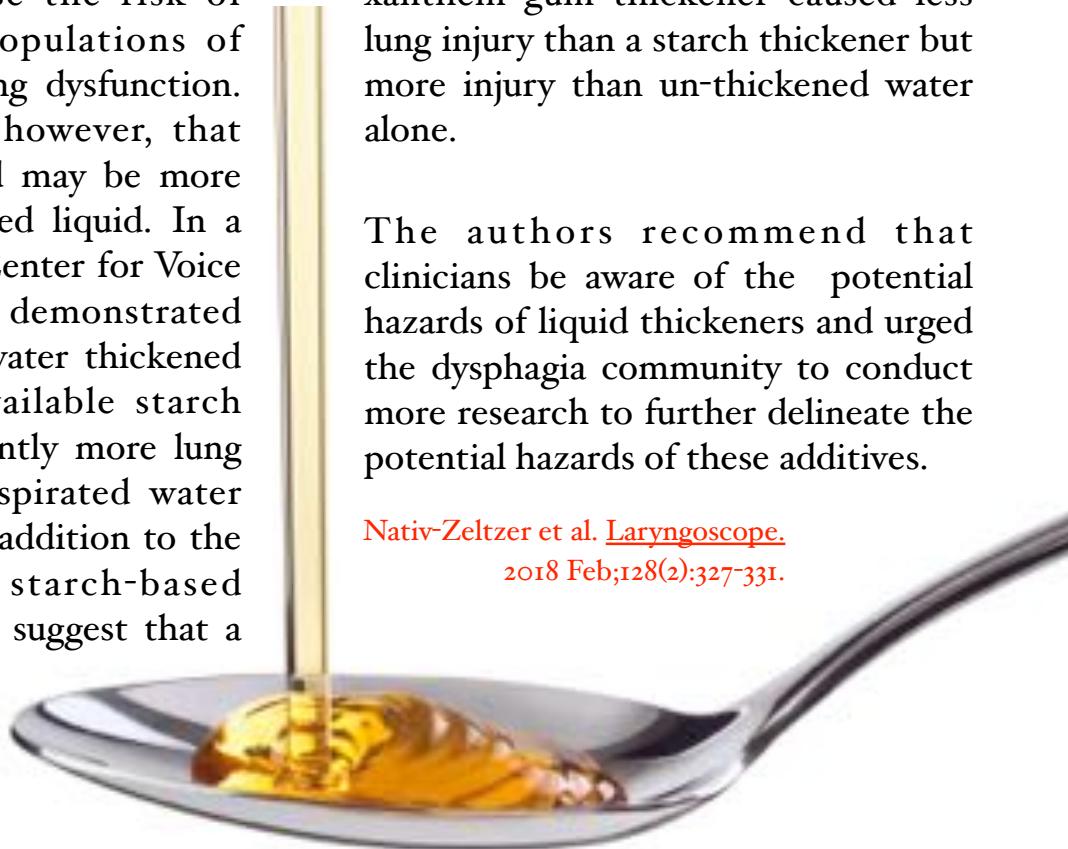
CAN THICKENERS CAUSE MORE HARM THAN GOOD?

Thickeners can decrease the risk of aspiration in certain populations of individuals with swallowing dysfunction. We have hypothesized, however, that aspirated thickened liquid may be more injurious than un-thickened liquid. In a prospective animal trial, Center for Voice & Swallowing scientists demonstrated that 3 days of aspirated water thickened with a commercially available starch thickener caused significantly more lung injury and death than aspirated water without the thickener. In addition to the detrimental effects of starch-based thickener, the results also suggest that a commercially available

xanthan gum thickener caused less lung injury than a starch thickener but more injury than un-thickened water alone.

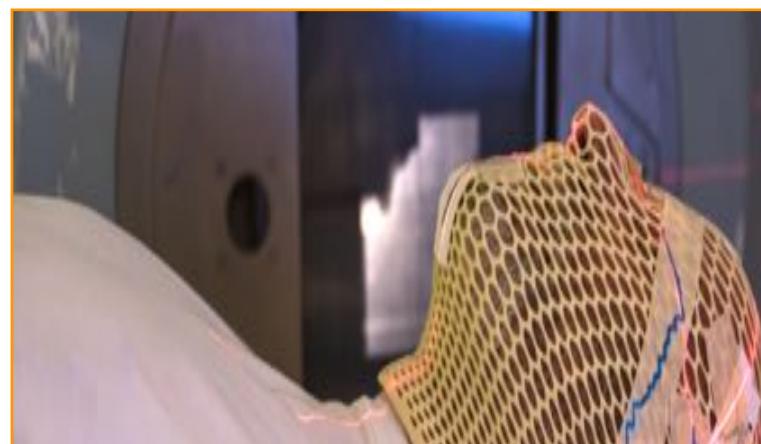
The authors recommend that clinicians be aware of the potential hazards of liquid thickeners and urged the dysphagia community to conduct more research to further delineate the potential hazards of these additives.

Nativ-Zeltzer et al. Laryngoscope.
2018 Feb;128(2):327-331.



PRE-TREATMENT DYSPHAGIA PREDICTS POST-TREATMENT FUNCTION IN HEAD & NECK CANCER

Chemoradiation (CRT) for head and neck cancer can have a profound impact on swallowing. The identification of risk factors for dysphagia after CRT may allow for more efficient allocation of preventive strategies. In work presented at the Annual Meeting of the American Broncho-esophagological Association, Center for Voice & Swallowing scientists identified the presence of dysphagia (EAT10 > 2) before CRT as a significant predictor of swallowing dysfunction after CRT in multivariate analysis. The results may help target intervention at individuals at high-risk of developing swallowing dysfunction after CRT.



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All of us have been impacted by dysphagia and its devastating consequences. Swallowing problems account for a large percentage of death in persons with ALS, Parkinson Disease, stroke, muscular dystrophy and head and neck cancer. We have dedicated our professional lives to improve the health and quality of life in persons affected by profound dysphagia. The status quo is not acceptable. We

must work together to do better. Through passion and innovation we will make a difference in the treatment of dysphagia in our lifetime. This is our mission.

Please join us in our **EAT NOW!** campaign. Please send your philanthropic donation payable to UC Regents to ...

UC Davis
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Sacramento, CA 95817

Appointments

To schedule an appointment at the UC Davis Center for Voice and Swallowing please contact our CVS coordinator at 916-734-8763.

Make a difference

We need your help. Much of our research is funded by philanthropic gifts from grateful patients. Your support will directly help the millions of individuals suffering from complex disorders of voice and swallowing worldwide. Join the movement of hope and help make a difference now. Please contact the Center for Voice and Swallowing Director of Development Sharon Schauer at 916-734-1053 or sschauer@ucdavis.edu.



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