

January 18, 2018



CTS *INSPIRATIONS*

CTS NEWS

President's Letter

Dear colleagues and friends,

It has been a sincere honor to serve as CTS president for the past year. 2017 has been an important year for CTS on nearly every major level. We began the year very challenged financially due to changes in the ABG proficiency testing program and overhead costs beyond our financial ability. Thanks to our administrative and professional leadership, we enter 2018 significantly more stable financially, and look forward to further improvement in serving CTS members and our mission in 2018. I am especially happy to report that improved financial balance has not required an increase in CTS membership dues.

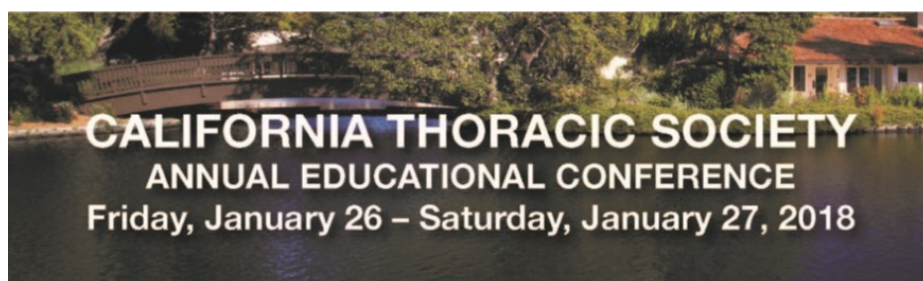


Improved stability allows us to better address our mission and improve our infrastructure. Our leadership for 2018 will include Philippe Montgrain as president, Lorri Leard as president elect, and Laren Tan as secretary. We have re-established the Nominating committee under the capable leadership of Tisha Wang. You will be receiving a slate of candidates to vote on CTS treasurer in the near future.

We all owe a great deal of thanks to Angela Wang and George Chaux. Both Angela and George have led CTS through difficult times, supplying both the vision and unending work required to get CTS back on track. I have never worked with more selfless, driven, kinder individuals.

We look toward advocacy and health care policy as an important area of work of CTS. A recent CBS Sunday Morning program <https://www.cbsnews.com/news/ted-koppel-grace-anne-koppel-on-living-with-copd-chronic-obstructive-pulmonary-disease/> featured Grace Koppel, wife of Ted Koppel, who despite seeking medical evaluation for disabling symptoms experienced delay in diagnosis of severe COPD. She and her husband have become leading advocates for COPD and Pulmonary Rehabilitation. During this airing of this show, Mrs. Koppel pointed out that COPD national funding ranks 155th in the US despite being the 3rd leading cause of death. We will begin exploring strategies to begin to address this inequity.

I normally prefer to avoid including politics in this newsletter, however ethics requires that I communicate my concern regarding a recent national government position on language that is now deemed unacceptable and forbidden from use by the CDC. Richard A. Robbins, MD, editor of the Southwest Journal of Pulmonary and Critical Care Medicine recently wrote an editorial on this topic that perfectly describes my position on this change in our government's position of unacceptable language for the CDC. The editorial is included in this newsletter.



We are looking ahead to another exciting **CTS conference** at the beautiful **Quail Lodge Resort** in **Carmel** on **Friday January 26** and **Saturday January 27, 2018**. Friday's symposium will feature a **Multidisciplinary Approach to Interstitial Lung Disease** featuring top international speakers, followed by fellow's poster competition (<https://calthoracic.org/events/2018-annual-educational-conference-for-poster-competitors/>), reception and the annual **Western Respiratory Club dinner** featuring **John Balmes MD**. Saturday's agenda includes a half day **Lung Cancer Symposium** followed by an **Update on Bronchiectasis**. For more information and to register, visit:

<https://calthoracic.org/events/2018-annual-educational-conference/>

CTS/WESTERN RESPIRATORY SOCIETY DINNER

Friday, January 26, 2018 at 6:45 p.m.

John Balmes - KeyNote Speaker



John Balmes MD, former CTS president and international expert on environmental exposure and lung disease.

“Where There's Wildfire, There is Smoke”

Dr. Balmes will discuss the increasing problem of catastrophic wildfires due to climate warming, drought, and the legacy of decades of fire suppression. Because of residential development in new areas leading to greater urban-wildland interface, larger numbers of people are being exposed to the risk of rapidly moving wildfires and high concentrations of wildfire smoke. The composition of wildfire smoke, associated health risks, and advice to the public will also be discussed. The need to implement climate change mitigation, forest maintenance, and improved early warning system policies will be emphasized.

Dinner tickets may be purchased at a cost of \$80 per ticket and you have a choice of beef, chicken, gluten-free or vegetarian. Tickets are still available on-line at the following link:

<https://calthoracic.org/events/2018-ctswestern-respiratory-club-dinner/>

Seven Words You Can Never Say at HHS

By Rick Robbins, MD

The recent announcement of the seven words you can never say at Health & Human Services (HHS) reminded me of the late George Carlin's routine, "Seven Words You Can Never Say on Television" (1). Policy analysts at the Centers for Disease Control (CDC) in Atlanta were told of the list of forbidden words at a meeting Thursday, December 14, with senior CDC officials who oversee the budget, according to an analyst who took part in the 90-minute briefing (2). The forbidden words are "vulnerable," "entitlement," "diversity," "transgender," "fetus," "evidence-based" and "science-based." In some instances, the analysts were given alternative phrases. Instead of



“science-based” or “evidence-based,” the suggested phrase is “CDC bases its recommendations on science in consideration with community standards and wishes,” the person said. In other cases, no replacement words were immediately offered.

This is the latest attempt by government departments to distort fact. As an example, The New York Department of Education tried a similar tactic in 2012 (3). Among the words were dinosaur, birthday, and Halloween. Some of the reasons given were that dinosaurs suggest evolution which creationists might not like; Halloween was targeted because it suggests paganism; and birthday because it isn’t celebrated by Jehovah’s Witnesses; The Bush administration waged a similar war on climate change (4). That war has been extended by the Trump Administration as part of their war on any science that the Trump administration does not like (5). Science that does not fit Trump’s agenda or ideology is insulted or called “fake news”. Climate change is fact and not a hoax dreamed up the Chinese as Trump has claimed (6).

Mr. Carlin is not alive to make fun of the latest war on free speech but perhaps others will take up Carlin’s calling. Seven words they might suggest be banned include stupid, moron, fool, clown, weird, dumb and incompetent-all frequently used by President Trump on Twitter (7). The CDC is a scientific organization. Appointing unqualified politicians to head scientific organizations to carry out a political agenda is like mixing oil and water. No matter how times you say it, the water will not float on top of the oil. Science relies on a precise vocabulary and is not Republican or Democrat, conservative or liberal, or right or left. In my view, those that banned these words made an indirect attack on fact and should be “ashamed” (7).

Richard A. Robbins, MD

Editor, SWJPCC

References

Carlin G. 7 words you can never say on television. Available at: <https://www.youtube.com/watch?v=kyBH5oNQOS0> (accessed 12/18/17).

Sun LH, Eilperin J. Words banned at multiple HHS agencies include ‘diversity’ and ‘vulnerable’. Washington Post. December 16, 2017. Available at: https://www.washingtonpost.com/national/health-science/words-banned-at-multiple-hhs-agencies-include-diversity-and-vulnerable/2017/12/16/9fa09250-e29d-11e7-8679-a9728984779c_story.html?utm_term=.c983e2f2af81 (accessed 12/18/17).

CBS News New York. War on words: NYC dept. of education wants 50 ‘forbidden’ words banned from standardized tests. March 26, 2012. Available at: <http://newyork.cbslocal.com/2012/03/26/war-on-words-nyc-dept-of-education-wants-50-forbidden-words-removed-from-standardized-tests/> (accessed 12/18/17).

Union of Concerned Scientists. Scientific integrity in policy making. September, 2005. Available at: <https://www.ucsusa.org/our-work/center-science-and-democracy/promoting-scientific-integrity/reports-scientific-integrity.html#.Wjf0TFWnGUK> (accessed 12/18/17).

Editorial Board. President Trump’s war on science. New York Times. September 9, 2017. Available at: <https://www.nytimes.com/2017/09/09/opinion/sunday/trump-epa-pruitt-science.html> (12/18/17).

Marcin T. What has Trump said about global warming? Eight quotes on climate change as he announces Paris agreement decision. Newsweek. June 1, 2017. Available at: <http://www.newsweek.com/what-has-trump-said-about-global-warming-quotes-climate-change-paris-agreement-618898> (accessed 12/18/17).

Lee JC, Quealy K. The 394 people, places and things Donald Trump has insulted on twitter: a complete list. New York Times. November 17, 2017. Available at: <https://www.nytimes.com/interactive/2016/01/28/upshot/donald-trump-twitter-insults.html> (accessed 12/18/17).

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Bronchial Thermoplasty – “A Double Take”

Laren Tan, MD, FCCP

Loma Linda University

Assistant Clinical Professor



Disclosures relevant to this article: Dr. Tan has acted as a consultant to Boston Scientific.

Asthma is defined by airway inflammation and hyperresponsiveness, and its increasing prevalence globally affects between 235 – 300 million people, with approximately 250,000 deaths worldwide.¹ Of the 25 million asthmatics, within the United States, 5%–10% (~1.2–2.4 million) have been reported to have asthma that is refractory to available standard oral and inhaled therapies.²

For those who are refractory to standard therapy, 40% have shown to be nonatopic, and exhibit glucocorticoid insensitivity.^{3,4} Observations suggest that an alternative pathway of airway hyperresponsiveness that modulates bronchomotor tone apart from inflammation may be mediated by airway and vascular smooth muscle, epithelium, endothelium, and nerves.⁵

Despite recent advances in biologic therapies (i.e. Anti-IL5 antibodies) for severe refractory asthmatics, nonatopic asthma or non-TH2 mediated asthma therapies should also be highlighted and considered. In 2010, bronchial thermoplasty (BT) was approved by the U.S. Food and Drug Administration for treatment of severe asthmatics >18 years of age who continue to be symptomatic despite being on optimal asthma therapy. BT offers a unique ability via its ability to deliver radiofrequency thermal energy to the proximal airway walls in a controlled manner, resulting in reduced airway smooth muscle (ASM) and subsequent ASM-mediated bronchoconstriction.

Studies by Chakir and colleagues⁶ as well as Denner and colleagues⁷ addressed pivotal questions regarding bronchial thermoplasty (BT) and its effects on matrix deposition, airway smooth muscle mass, and inflammation in severe persistent asthma. BT was shown to decrease smooth muscle mass or cells expressing smooth muscle actin, a surrogate for cells with a smooth muscle phenotype. Their findings described a 30-70% decrease in airway smooth muscle mass after BT, which was also comparable to a study performed by Pretolani M and colleagues in 2016. In addition to significant decrease in airway smooth muscle, Pretolani and colleagues were also able to show a significant correlation between decrease in ASM and improved clinical outcomes.⁸ These clinical findings were consistent with previous studies performed by Castro and colleagues where BT was found to decrease severe exacerbations requiring systemic corticosteroids, emergency department visits and improved patient reported symptom control, all of which were sustained over the course of 5 years.⁹

Although the need for personalized asthma therapy is agreed amongst asthmato-logists, there continues to be resistance to BT. One of the major critiques cited was the severity of patients enrolled in the Asthma Intervention Research (AIR2) trial and the question of clinical outcomes in the more severe asthmatic population. A recent publication by Chupp and colleagues¹⁰ late this past August sought to answer these questions. The Post-FDA approval clinical trial evaluating bronchial thermoplasty in severe persistent asthma (PAS2) compared 190 PAS2 subjects with 190 BT-treated subjects in the AIR2 trial at 3 years of follow up. Subjects in PAS2 were older, more obese and took higher doses of inhaled corticosteroids. They also experienced more severe exacerbations and hospitalizations in the 12 months prior to BT when compared to those in the AIR2 trial. Despite having more severe asthmatic subjects in the PAS2, at 3 years after BT, PAS2 subjects had significant decreases in severe exacerbations (45%), emergency department visits (55%) and hospitalizations (40%), echoing the AIR2 results. FEV₁ remained unchanged from baseline throughout the 3-year follow-up period in both the PAS2 study and AIR2 trial. PAS2 was able to demonstrate the real-world efficacy of BT in a more severe asthmatic population and validated the positive results in AIR2. It also confirmed the sustained treatment effect out to 3 years with no prolonged safety concerns.

BT is an established, clinically proven, vital alternative in asthma patient centered care.¹¹ It was “out-of-the-box,” forward thinking that made it possible to provide BT as an additional modality for asthmatics who have failed conventional therapy and in the future perhaps even biologic therapy. Regardless of the provided asthmatic therapy, it is essential that a thorough history and workup be performed. Assessment of asthma phenotype to determine atopy status and other plausible etiologies (i.e. inhaler technique, GERD, VCD) for poor asthma control should also be explored as barriers to better asthma control.

In the era of personalized medicine, bronchial thermoplasty should also be considered as part of the armamentarium in precision asthma therapy. The increasing number of clinically proven treatment options provide renewed hope for severe refractory asthmatics. Although more work and clinical experience is necessary to determine the best therapy for each severe refractory asthmatic, advances in biologic treatments and a “double take” look at BT can prove to be extremely rewarding for our patients.

References:

- 1) World Health Organization (WHO). Asthma Fact Sheet; 2017. Available from: <http://www.who.int/mediacentre/factsheets/fs307/en/>
- 2) Tan LD, Bratt JM, Godor D, Louie S, Kenyon NJ. Benralizumab: a unique IL-5 inhibitor for severe asthma. *J Asthma Allergy*. 2016;9:71–81.
- 3) Bousquet J, Gern JE, Martinez FD, Anto JM, Johnson CC, Holt PG, Lemanske RF Jr, Le Souëf PN, Tepper RS, von Mutius ER, et al. Birth cohorts in asthma and allergic diseases: report of a NIAID/NHLBI/MeDALL joint workshop. *J Allergy Clin Immunol* 2014;133:1535–1546.
- 4) National Asthma Education and Prevention Program. Expert Panel Report 3: Guidelines for the Diagnosis and Management of Asthma. Bethesda, MD: National Heart, Lung, and Blood Institute; 2007 [accessed 2012 Nov 28]. Available from: <http://www.nhlbi.nih.gov/files/docs/guidelines/asthgdln.pdf>
- 5) Black JL, Panettieri RA Jr, Banerjee A, Berger P. Airway smooth muscle in asthma: just a target for bronchodilation? *Clin Chest Med* 2012;33:543–558.
- 6) Chakir J, Haj-Salem I, Gras D, Joubert P, Beaudoin EL, Biardel S, Lampron N, Martel S, Chanez P, Boulet LP, et al. Effects of bronchial thermoplasty on airway smooth muscle and collagen deposition in asthma. *Ann Am Thorac Soc* 2015;12:1612–1618.

References Continued:

- 7) Denner DR, Doeing DC, Hogarth DK, Dugan K, Naureckas ET, White SR. Airway inflammation after bronchial thermoplasty for severe asthma. *Ann Am Thorac Soc* 2015;12:1302–1309.
- 8) Pretolani M, Bergqvist A, Thabut G, Dombret MC, Knapp D, Hamidi F, Alavoine L, Taillé C, Chanez P, Erjefält JS, Aubier M. Effectiveness of bronchial thermoplasty in patients with severe refractory asthma: Clinical and histopathologic correlations. *J Allergy Clin Immunol*. 2017 Apr;139(4):1176-1185.
- 9) Castro M, Rubin AS, Laviolette M, Fiterman J, De Andrade Lima M, Shah PL, Fiss E, Olivenstein R, Thomson NC, Niven RM, et al.; AIR2 Trial Study Group. Effectiveness and safety of bronchial thermoplasty in the treatment of severe asthma: a multicenter, randomized, double-blind, sham-controlled clinical trial. *Am J Respir Crit Care Med* 2010;181:116–124.
- 10) Geoffrey Chupp, Michel Laviolette, Lauren Cohn, Charlene McEvoy, Sandeep Bansal, Adrian Shifren, Sumita Khatri, G. Mark Grubb, Edmund McMullen, Racho Strauven, Joel N. Kline. Long-term outcomes of bronchial thermoplasty in subjects with severe asthma: a comparison of 3-year follow-up results from two prospective multicentre studies. *Eur Respir J*. 2017 Aug; 50(2): 1700017.
- 11) Tan LD, Kenyon N, Yoneda KY, Louie S. Bronchial thermoplasty: implementing best practice in the era of cost containment. *Journal of Asthma and Allergy*. 2017;10:225-230.

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Title (Click on title to be taken to the manuscript, CME in Bold)	Journal Section	First Author	Year	Vol	Issue	Pages	Date Posted
Medical Image of the Week: Fat Embolism	Imaging	Kim HJ	2017	15	6	297-8	12/27/17
Medical Image of the Week: Central Venous Access with Dextrocardia	Imaging	Natt B	2017	15	6	296	12/20/17
Seven Words You Can Never Say at HHS	Editorial	Robbins RA	2017	15	6	294-5	12/18/17
Diffuse Idiopathic Pulmonary Neuroendocrine Cell Hyperplasia in a Patient with Multiple Pulmonary Nodules: Case Report and Literature Review	Pulmonary	Yamin HS	2017	15	6	282-93	12/14/17
Tax Cuts Could Threaten Physicians	News	Robbins RA	2017	15	6	280-1	12/13/17
Medical Image of the Week: Mucous Plugs Forming Airway Casts	Imaging	Ateeli H	2017	15	6	278-9	12/13/17
Necrotizing Pneumonia: Diagnosis and Treatment Options	Pulmonary	Skidmore BD	2017	15	6	274-7	12/11/17
Equitable Peer Review and the National Practitioner Data Bank	Editorial	Robbins RA	2017	15	6	271-3	12/8/17
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Medical Image of the Week: Barium Aspiration	Imaging	Natt B	2017	15	6	267-8	12/6/17
December 2017 Imaging Case of the Month	Imaging	Gotway MB	2017	15	6	253-66	12/4/17
December 2017 Critical Care Case of the Month	Critical Care	Gotway MB	2017	15	6	241-52	12/2/17
December 2017 Pulmonary Case of the Month	Pulmonary	Wesselius LJ	2017	15	6	232-40	12/1/17

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18 Bartol St. #1054 | San Francisco, CA, 94133 | 415-536-0287

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CTS Editors:

Angela Wang, MD

Chris Garvey, NP

Laren Tan, MD