

August 27, 2019



CTS INSPIRATIONS

CTS NEWS

President's Message

It is that "Back to School" time of year. As you are crossing things off your To Do list, don't miss out on the Early Bird deadline of September 13th to register for our Southern California Educational Conference on October 4-5, 2019 at the Hotel Irvine in Irvine! Here is the link to registration: <https://calthoracic.org/events/2019-southern-annual-educational-conference/>. You can also use this time to renew your [membership](#), or encourage your [institution](#) or [group](#) to join.



I am also pleased to announce our recent election results. Our amended bylaws have been approved. **Dr. Michelle Cao** has been elected to fill our currently open Treasurer position and **Dr. Ni-Cheng Liang** has been approved as one of our two representatives to the ATS Council of Chapter of Representatives. Dr. Liang will be replacing our current CCR representative **Dr. Angela Wang** who has been an amazing champion for our chapter after serving as a past president of our society. We are indebted to Angela and cannot thank her enough for her continued involvement, advice, and advocacy to our society, including as ongoing editor of CTS Inspirations! Thank you to all of the members who took the time to vote.

Please take a moment to nominate one of your colleagues for the [Outstanding Clinician Award](#). We will have an awardee for our chapter. The awardee will be recognized at the ATS conference and our chapter awardee will also be nominated for the ATS Outstanding Clinician Award. See full details for eligibility and how to nominate below.

I hope to see many of you in October. Please stop me or any of the CTS Board Members to say hello and to let us know how our society can better serve you!

Warmest regards,

Lorriana Leard, MD
President, California Thoracic Society

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Editor's note

So much of the news about doctors these days is *negative*. We see our shortcomings magnified and projected onto print and social media where it reverberates through tweets and retweets, clips and shares. Even if well-intentioned, the public attempts to improve and correct our behavior often seem shrill and scolding, overshadowing the thousands of daily examples of kindness and compassion. To those of us who went into medicine to be healers, who struggle against the commoditization of healthcare, the barrage of criticism only accentuates the sense of moral injury. In this issue, we feature our first piece of narrative literature, a poem by Paul Quinton. A small thing perhaps, but one that reminds of our humanity and the inner light that we all carry within ourselves.

Morning by Paul Quinton

And why can morning not last all day,
All afternoon,
All night, then stay.

Morning bright and light
Clean and New
Clear and Slight
Brisk with Dew

Why must morning go away
Why can it not stay-
UnStolen by the rest of day
UnDrowned by dimming hours
Unburied by blindness in the sway.

Why can morning never stay?



In his childhood, Paul Quinton played in the piney woods of southeast Texas. He had a dog, raised a calf, had a horse named "old Tom" and then a little mare named "Texas" that broke his arm. He fed the pigs and chickens. Gathered eggs and raised rabbits. He loved tree houses, zip lines, bag swings and playing Robin Hood and Little John with his little brother Tim. Fox squirrels, cotton tail rabbits, racoons, 'possums, armadillos, mocking birds, crows, buzzards, cardinals, and hawks were continually instructed him.

He graduated with a BA in literature from the University of Texas, Austin, and as an undergraduate, he took a self-taught course in hitch-hiking through southern South America, followed by a doctorate in cell biology from Rice University. Thereafter, he became a faculty member at the University of California medical schools at Los Angeles, Riverside, and San Diego. His medical-science research career has always focused on understanding the pathophysiology of Cystic Fibrosis.

Bronchial Thermoplasty—A Viable Option for the Problematic Asthmatic

Laren Tan, MD, FCCP
Loma Linda University
Assistant Clinical Professor



Asthma continues to be a difficult disease to control due to varying heterogeneity and severity. What was once thought of as a single disease is becoming more accepted as a series of complex, overlapping individual phenotypes that are likely an end result of genetic and environmental factors. The most difficult cases of asthma that are refractory to standard of care therapy within the United States have been reported to range between 5 and 10%.^{1,2} Of those that are refractory to standard treatment, 40% have shown to be non-atopic, and exhibit glucocorticoid insensitivity.^{3,4} These observations suggest that an alternative pathway of airway hyperresponsiveness exists that modulates bronchomotor tone distinct from inflammation and may be mediated by airway and vascular smooth muscle, epithelium, endothelium, and nerves.⁵ Biopsies of such airways have shown airway smooth muscle hypertrophy, goblet cell hyperplasia and increased airway mucus obstruction.^{3,4}

These changes in airways are likely the reason for worsening asthma symptoms as well as exacerbations. To date, the only advanced therapy that shows a significant decrease in airway smooth muscle (ASM) with improvement in quality of life, severe exacerbations, emergency department visits and hospitalizations is bronchial thermoplasty (BT).^{3,4,6-9} While advanced biologic therapies (i.e., Anti-IgE, Anti-IL5 antibodies) for severe refractory asthma have shown varying responses based on the degree of Type-2 (T2) Inflammation, BT is unique in being a viable option regardless of severity of T2 inflammation. Presently, BT has been more commonly performed in non-atopic asthma or non-T2 mediated asthma and has been utilized in patients who have failed biologic therapy.⁵ It was approved by the U.S. Food and Drug Administration in 2010 for the treatment of severe asthmatics >18 years of age that continue to be symptomatic despite being on optimal asthma therapy. The therapeutic approach for BT relies on its unique ability to deliver radiofrequency thermal energy to the proximal airway walls in a controlled manner that results in reduced airway smooth muscle (ASM) and subsequent ASM-mediated bronchoconstriction.

BT underwent extensive preclinical studies that demonstrated unequivocal attenuation of airway narrowing in response to endobronchial instillation of methacholine using dog airways. Evaluation of the airway histology in the dogs revealed that the ASM was reduced by 40% to 60%.⁶ The first randomized controlled trial of BT (Asthma Intervention Research [AIR] 1) demonstrated significant improvements in asthma symptom-free days and asthma-related quality of life as measured by the Asthma Control Questionnaire (ACQ) and the Asthma Quality of Life Questionnaire (AQLQ). There were no differences in forced expiratory volume in 1 second (FEV1) or airway hyperresponsiveness.⁷ A second trial was designed to evaluate BT in more severe symptomatic patients (Research in Severe Asthma [RISA]). BT subjects had a significant improvement in FEV1 and in ACQ.⁸ While compelling, these trials were not blinded and the world's first sham bronchoscopy controlled trial (AIR2) was designed in consultation with the FDA. This multicentered, double-blind, sham bronchoscopy controlled trial enrolled a total of 288 patients to BT in a 2:1 fashion. This pivotal trial demonstrated a significant improvement in the AQLQ score as well as a reduction in the frequency of severe asthma exacerbations, emergency department visits, and days lost from school or work in the year after BT.⁹ A postmarketing study (the PAS2 study), was a 3-year follow-up study that confirmed the results of the pivotal AIR2 study. As a registry study, it was not randomized or controlled and AQLQ scoring was not performed. However, it did demonstrate a reduction in severe exacerbations, emergency department visits, and hospitalizations. It also confirmed the sustained treatment effect of BT out to 3 years with no prolonged safety concerns.¹⁰

According to the latest 2019 Global Initiative for Asthma (GINA)¹¹, BT is recommended for severe asthmatics that continue to be symptomatic despite being on optimal therapy. The 2014 American Thoracic Society (ATS)/European Respiratory Society (ERS) task force on severe asthma,^{12,13} recommends that access to BT should not be limited as a form of therapy¹⁴ but be performed in the context of a registry or clinical study. Although many large academic BT centers keep track of their patient outcomes for quality control purposes, these same recommendations also pose an undue burden on the nonacademic practicing pulmonologist. And, while many clinicians agree with the clinical BT practice recommendations of the 2019 GINA update, payors have been slow to adopt these recommendations, resulting in suboptimal coverage for BT throughout the United States.

Despite these barriers, BT continues to be an established, clinically proven, vital alternative in asthma patient-centered care.¹⁵ Its success is fundamentally dependent on *identifying the right patient, implanting proper BT technique and intense post-procedural care and follow up*.⁵ It is also critical to identify the patient's needs, values and preferences; these shared decision making components combined can even be collectively thought of as a patient's "life-markers." In the era of biologic and non-biologic therapy for severe asthma, the principle of going beyond "bio-markers" and thinking of "life-markers" is a concept that continually needs to be highlighted in order to fully implement patient-centered care.

While there are now multiple options available for the treatment of moderate to severe refractory asthma, bronchial thermoplasty should also be considered as part of the armamentarium in precision asthma therapy. All available options should be considered as it enables the suffering asthmatic renewed hope in achieving better asthma control. Although more work and clinical experience is necessary to determine the best therapy for each moderate to severe refractory asthmatic. Bronchial thermoplasty should always be considered as a viable option for that problematic asthmatic.

Disclosure:

Advisory boards: Astra Zeneca, Sanofi, Regeneron, Boehringer Ingelheim; Consultant: Boston Scientific; Speakers Bureau: Sanofi, Regeneron, Boehringer Ingelheim, Astra Zeneca

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CALIFORNIA OUTSTANDING CLINICIAN AWARD NOMINATIONS

Each year, the American Thoracic Society (ATS) honors an exemplary community or academic clinician through its Outstanding Clinician Award (OCA). In addition, Thoracic Society Chapters may nominate an individual for their Chapter OCA award. The OCA recognizes exemplary clinicians who are dedicated to direct patient care. While each Thoracic Society Chapter chooses its own recipient, each year only one national award recipient is selected.

The eligibility criteria are: (1) A pulmonary, critical care or sleep clinician who spends 75% or more of his/her time providing direct patient care; (2) Recognized by patients and families as a caring and dedicated healthcare provider and by his/her peers as having made substantial contributions to the clinical care of patients with respiratory disease; (3) A member of the California Thoracic Society and a resident of California; (4) A member of the ATS (to be considered for the national level award).

CTS members who wish to nominate an outstanding clinician should get the approval of the prospective nominee and then forward that individual's name and CV to CTS at info@calthoracic.org. CTS will then select the California OCA awardee and submit his/her nomination to ATS for consideration for the National OCA.

The deadline to submit nominations to CTS is September 17, 2018.

The person submitting the nomination as well as the California Outstanding Clinician Awardee will then be asked to compile:

- One** nomination letter (limited to 1000 words – a maximum of five additional supporters may be added), and
- One** patient letter (this is allowed only for the OCA award)

The deadline for submission to ATS is Friday, October 4, 2019. More information about the award and past awardees can be [accessed here](#). We sincerely hope you will nominate a deserving colleague or mentor.

The OCA award is now officially one of the ATS Respiratory Health Awards and is truly a great honor!

Medicare for all—good idea or political death?

originally published as

Robbins RA, Wang AC. *Southwest J Pulm Crit Care*. 2019;19(1):18-20. doi: <https://doi.org/10.13175/swjpc051-19>

Several Democratic presidential candidates have pushed the idea of “Medicare for All” and a “Medicare for All” bill has been introduced into the US house with over 100 sponsors. A recent *Medpage Today* editorial by Milton Packer asks whether this will benefit patients or physicians (1). Below are our views on “Medicare for All” with the caveat that we do not speak for the American Thoracic Society nor any of its chapters.

It has been repeatedly pointed out that medical care in the US costs too much. US health care spending grew 3.9 percent in 2017, reaching \$3.5 trillion or \$10,739 per person, and 17.9% of the gross domestic product (GDP) (2). This is more than any industrialized country. Furthermore, our expenditures continue to rise faster than most other comparable countries such as Japan, Germany, England, Australia and Canada (2).

Despite the high costs, the US does not provide access to healthcare for all of its citizens. In 2017, 8.8 percent of people, or 28.5 million, did not have health insurance at any point during the year (3). In contrast, other comparable industrialized countries provide at least some care for everyone. Furthermore, our outcomes are worse. Infant mortality is higher than any similar country (4). US life expectancy is shorter at 78.6 years compared to just about any comparable industrialized country with Japan leading the way at 84.1 years. All the Western European countries (such as Germany, France, England, etc.), as well as Australia and Canada have a longer life expectancy than the US (range 81.8-83.7 years).

Our high infant mortality and lagging life expectancy was not always so. In 1980, the US had similar infant mortality and life expectancy when compared to other industrialized countries. Why did we lose ground over the last 40 years? Beginning in about 1980, there have been increasing business pressures on our healthcare system. In his editorial, Packer called our system “financialized” to an extreme (1). Hospitals, pharmaceutical and device companies, insurance companies, pharmacies and sadly, even some physicians often price their products and services not according to what is fair or good for patients but to maximize profit. By incentivizing procedures that often do not benefit patients but benefit the businessmen’s’ pockets, these practices likely account for the high costs and for our worsening outcomes.

Packer points out that in the US, intermediaries (insurers and pharmacy benefit managers) exert considerable control of payment while unnecessarily adding to the administrative costs of healthcare. Congress has been pressured to forbid Medicare from negotiating prices with pharmaceutical companies benefitting only the drug manufacturers and those that benefit from the high drug prices. Consequently, administrative costs are four times higher and pharmaceuticals three times greater in the U.S. than in other countries.

If “Medicare for All” could reduce healthcare costs and improve outcomes, it might seem like a good idea. It has the potential for reducing administrative costs and assuming the power to negotiate drug prices was restored, pharmaceutical costs. However, it will be opposed by those who financially benefit from the present system including administrators, hospitals, pharmaceutical companies, pharmacy benefit managers, insurance companies, etc. Furthermore, there is a libertarian segment of the population that opposes any Government interference in healthcare, even those that would strengthen the free market principles that so many libertarians tout. There are already TV ads opposing “Medicare for All.” It seems likely that any “Medicare for All” or any similar plan will meet with considerable political opposition.

One solution might be to have both Government and non-Government plans. Assuming transparency in both services covered and costs, it leaves the choice in healthcare plans where it belongs-with those paying for the care. It also makes it much harder for those with financial or political interests to convincingly argue against a Government plan (although we are sure they will try). It will force insurance companies to reduce their prices and/or offer more coverage, which is not a bad thing for patients and ultimately, the healthcare system as a whole. However, it does impose a risk, i.e., that profit-driven insurance companies and those who benefit from the current infrastructure will be replaced by bureaucrats who are primarily concerned with administrative procedure rather than patient care. Present day examples include the VA, Medicare and Medicaid systems. Close public and medical oversight of such a system would be needed.

Ideally, a healthcare system should ensure that citizens can access at least a basic level of health services without incurring financial hardship and with the goal of improving health outcomes. Such a system, would provide a middle path between the extremes of paying for nothing and paying for everything such as unwarranted chemotherapy, stem cell therapy, or unnecessary diagnostic procedures. Determining what services are covered, and how much of the cost is covered are not easy questions to answer, but promises to deliver better health for less money than our current system. Physicians, by dint of their training, and responsibility to uphold their profession and protect their patients, understand that healthcare is not a mere commodity. If we are to protect what little autonomy we have left, we need to be a part of the discussion which should not be driven solely by those in the insurance, the hospital and the pharmaceutical industries.

Richard A. Robbins, MD¹

Angela C. Wang, MD²

¹Phoenix Pulmonary and Critical Care Research and Education Foundation, Gilbert, AZ USA

²Scripps Clinic Torrey Pines, La Jolla, CA USA

FOR ALL SUBSEQUENT CORRESPONDENCE OR QUESTIONS REGARDING THIS MANUSCRIPT, IT IS IMPORTANT THAT YOU CONTACT THE EDITOR

AT rickrobbins@cox.net; swjpcc@cox.net; or <http://www.swjpcc.com/contact-the-editor/>

SWJPCC Journal - Volume 19 (July - August 21, 2019)

Volume 19							
Title (Click on title to open the manuscript, CME in Bold)	Journal Section	First Author	Year	Vol	Issue	Pages	Date Posted
Severe Accidental Hypothermia in Phoenix? Active Rewarming Using Thoracic Lavage	Critical Care	Mozer M	2019	19	2	79-83	8/21/19
CEO Compensation-One Reason Healthcare Costs So Much (News)	News	Robbins RA	2019	19	2	76-8	8/19/19
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Left Ventricular Assist Devices: A Brief Overview	Critical Care	Gali B	2019	19	2	68-72	8/14/19
Medical Image of the Week: Diffuse Pulmonary Ossification	Imaging	Sears S	2019	19	2	65-7	8/2/19
August 2019 Imaging Case of the Month: A 51-Year-Old Man with a Headache	Imaging	Gotway MB	2019	19	2	52-64	8/1/19
Medicare for All-Good Idea or Political Death?	Editorials	Robbins RA	2019	19	1	18-20	7/26/19
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Medical Image of the Month: Bilateral Atrial Enlargement	Imaging	Raschke RA	2019	19	1	10-1	7/2/2019
July 2019 Critical Care Case of The Month: An 18-Year-Old with Presumed Sepsis and Progressive Multisystem Organ Failure	Critical Care	Raschke RA	2019	19	1	1-9	7/1/2019

California Thoracic Society

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

Sachin Gupta, MD