THE EDITOR’S DESK

Science and Clinical Potpourri for Your Life and Your Practice

Being Overweight: Prejudice Against Foreigners


In a very curious irony, it seems that being overweight can actually buffer some from race-based assumptions about who is a real American. A series of 10 studies involved participants who were shown pictures that were computer-modified to make the Asian subject in the photograph appear either normal weight or overweight (BMI > 25). The resultant meta-analysis (that is, a combined synthesis of the 10 studies) found that those subjects in the photographs who were rendered overweight were perceived as being significantly more American than their normal-weight versions. With Asian Americans now the fastest growing minority in the US they are perceived as “less American” than white Americans in a number of studies. These findings reveal that perceptions nationally are highly malleable and that perceived race and even body shape interact in a complex way to inform these judgments.

New Data on Opioid Use and Prescribing in the US


Given that the US is amidst an opioid overdose epidemic, with deaths directly related to the epidemic (at least 33,091 deaths in 2015 alone), there is increasing emphasis to manage the prescribing practices of health care providers, given that about half of these deaths involved prescriptive opioids. Given that there is an estimated 2 million Americans who are addicted to opioids, the cumulative economic burden is in the range of $78.5 billion. There is some reason to be somewhat optimistic. With greater appreciation of the issues the CDC reports that in Ohio and Kentucky implementation of pain clinic regulations that required clinicians to review prescription drug monitoring program data led to major decreases in opioid prescribing. Florida implemented similar regulations with similar results, finding that these types of state innovations demonstrate that substantial changes are possible. It is important to recognize that opioid involved overdose death rates continue to increase, driven primarily by the use of illicit opioids such as heroin and illegally manufactured synthetics such as fentanyl.

Accelerated Approval and Expensive Drugs: A Challenging Combination


An accelerated approval (AAp) process for drugs has been in place for over 20 years, first initiated in response to caring for those afflicted with HIV/AIDS. This pathway, which has expanded over the years to include oncologic and other drugs, demands that a drug manufacturer conduct post-approval trials to establish efficacy, as the original marketed drugs must contain the following: “The clinical benefit has not been established.” There has been success and failures with this approach and an important challenge concerns insurers deciding on whether and how to pay for them, not easily addressed given the enormous costs often involved. One example is Exondys 51, AAp for muscular dystrophy, but contestently debated regarding its efficacy. The manufacturer placed a $300,000 per year cost (or more depending on body weight) with one carrier (Anthem) declining to cover it due to its “experimental” nature. Medicare is required to cover drugs that are “reasonable and necessary” but the domain is greatly complicated by cost, science, emotion, and politics. In this time of constrained resources at both state and federal levels the debate, and contentiousness, is likely to continue.

In utero Exposure to Diesel Exhaust Particulates Is Associated with an Altered Cardiac Transcriptional Response to Transverse Aortic Constriction and Altered DNA Methylation

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Despite the intimidating study title, this study is the first to demonstrate a genetic-based cause and effect relationship of in utero exposure to diesel exhaust air pollution and subsequent cardiac pathophysiology. Using RNA sequencing on adult
hearts from mice that were exposed to diesel exhaust while developing in utero, the authors identified 3 target genes which demonstrated dysregulation after exposure and aortic constriction. This work is very important from a mechanism of injury perspective as it identified specific DNA methylation (a process by which chemical changes induced by outside influences can inactivate segments of DNA code) and gene expression effects. The research adds to the body of evidence that air pollution has significant short and long term effects, and that even in the developing fetus, the effect can persist for many decades that follow.

**Impact of Low-dose CT Screening on Smoking Cessation Among High-Risk Participants in the UK Lung Cancer Screening Trial**

Thorax. 2017;0:-1-7. Online first, 7/14/17.

The World Health Organization estimates that there are over a billion smokers in the world, meaning one in three adults on planet earth. China is the biggest producer and consumer of cigarettes, with more than 350 million residents being smokers, with 36.5 million smokers here in the US. With knowledge that tobacco smoking can have dire consequences, these investigators explored the effect on smoking cessation of taking part in a randomized pilot trial of low dose CT lung screening. The researchers found that CT lung cancer screening for high-risk participants offers a teachable moment for smoking cessation, especially for those who receive a positive scan result. This study adds to the evidence suggesting that integrating CT screening with evidence-based smoking cessation intervention could prompt quitting in motivated, high-risk smokers.

**Author’s Correction**

In the April 2017 issue the authors correct the sentence on page 145, right column, line 14 by changing the beginning of the sentence to read “Orthostatic hypotension is defined as…” so the sentence reads: “Orthostatic hypotension is defined as a decrease in systolic blood pressure of 20 mm Hg or diastolic blood pressure of 10 mm Hg within 3 minutes of standing from a seated or supine position.” See Conley A, Biddle C, Baker K. AANA Journal. Course: A Tour of Autonomic Reflex Activity Relevant to Clinical Practice. AANA J. 2017;85(2):141-147. The online version of the article has been corrected.