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The fall edition of *Working Well* highlights holiday safety by discussing alcohol use and ways to curb over use during celebrations. Enjoying the holiday season should be



Dana Rawl, MD, MPH

just that — not overindulging in alcoholic spirits that could lead to a preventable tragedy. Of course, overindulging in fantastic foods over the holidays may be a point of consternation in the New Year. Jessica Mango has been kind enough to present some “do’s, but don’ts” to help reduce caloric temptations. “Nurse Practitioner Pearls” outlines stretching exercises to decrease fatigue and stress, and increase energy and blood flow to keep you feeling well and looking good.

The article on attention deficit hyperactivity disorder explains issues that inhibit ADHD patients from optimum performance and provides good advice on personnel management of all employees, not only those who have ADHD. Dr. Will Brearley submitted an excellent article on coronary calcium scoring and cardiac CT angiography, outlining the present tools that help determine cardiovascular disease. This article is a great reference tool for those with personal or family risk for cardiovascular disease.

Contact me at darawl@lexhealth.org if you have suggestions for future subjects of interest or if you would like to share an interesting article on safety or wellness. The best defense against illness and injury is knowledgeable prevention. Be safe out there.

— Dana Rawl, MD, MPH

Accommodating ADHD

By Dana Rawl, MD, MPH

Attention deficit hyperactivity disorder is a highly genetic, brain-based syndrome that affects particular brain functions and related behaviors. These brain functions are collectively referred to as “executive functioning skills” and include attention, concentration, memory, motivation and effort, and corrective learning from mistakes. Related ADHD behaviors can include impulsivity, hyperactivity, and dysfunctional organizational and social responses. ADHD can be recognized as a persistent pattern of inattention and/or hyperactivity that interferes with social or work functioning. ADHD is in no way a factor in a person’s intellectual ability.

About 5 percent or about 11 million adults in the United States have ADHD. Even though ADHD is not specifically listed as a disability under the Americans with Disability Act, ADHD may fall into ADA criteria as a protected disability if there is a “physical or mental impairment that substantially limits one or more life activities.” As such, ADHD may be a protected disability and present as a medical condition that employers will have to consider under ADA work accommodations.

The following information is intended to provide suggestions to improve and optimize employees’ performance through recognition and implementation of management techniques applicable to employees with ADHD. (Some of the following considerations may help productivity in the general workforce as well.)

1. **Distractibility:** External distractions such as noises or movements in the immediate area.
 - ▶ Consider quiet cubicle or office, or close office doors.
 - ▶ Use earphones for classical music or sounds.
 - ▶ Route phone calls directly to voicemail, and designate a set time to attend to messages.
 - ▶ Write down ideas to reduce interruptions of the current task.
 - ▶ Move inbox outside the office door.
2. **Short attention span:** Difficulty maintaining concentration.
 - ▶ Provide new stimulations with interesting projects or tasks.
 - ▶ Change the schedule to break the routine.
3. **Hyper-focus:** Losing track of time.
 - ▶ Set timer to stay on task. Use alarm loud enough to demand employee’s attention.
 - ▶ Break up long tasks into shorter increments.

4. **Hyperactivity:** Need for movement that makes sedentary work intolerable.

- ▶ Get the employee physically moving, and use breaks to get out of the chair.
- ▶ Take notes during meetings.
- ▶ Exercise at lunch.

5. **Poor memory**

- ▶ Take notes or use recording devices.
- ▶ Follow up oral communications with emails to have written record.
- ▶ Use a day planner.
- ▶ Write a checklist for complicated tasks.

6. **Time management:** Difficulty in organizing time, projects and goals.

- ▶ Plan early arrival to meetings, work and appointments.
- ▶ Use timelines to break large projects into smaller steps.

7. **Procrastination and over-commitment:** Putting off a task or over-committing reduces productivity and performance.

- ▶ Set deadlines for the employee.
- ▶ Ask for progress reports.
- ▶ Consider teaming with a co-worker who can manage his or her time.

8. **Interpersonal and social skills:** Unintentionally offending co-workers, low self-esteem.

- ▶ Ask for feedback from co-workers.
- ▶ Work with coach to learn non-verbal cues.
- ▶ Place in position with greater autonomy.

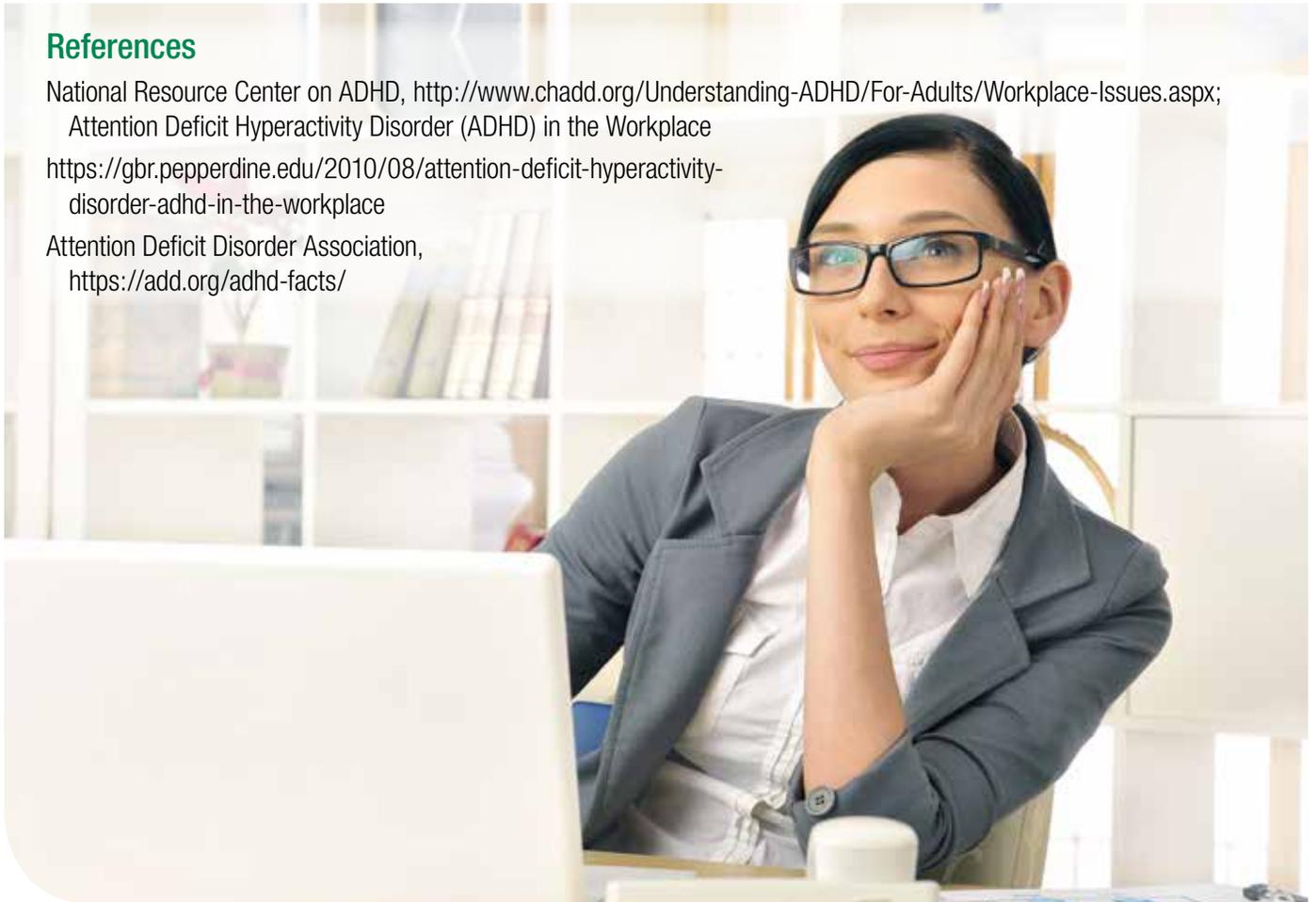
Understanding how ADHD can affect an employee should allow leadership and management to recognize and implement relatively minor accommodations to assist the employee with optimizing his or her full performance potential. ☺

References

National Resource Center on ADHD, <http://www.chadd.org/Understanding-ADHD/For-Adults/Workplace-Issues.aspx>;
Attention Deficit Hyperactivity Disorder (ADHD) in the Workplace

<https://gbr.pepperdine.edu/2010/08/attention-deficit-hyperactivity-disorder-adhd-in-the-workplace>

Attention Deficit Disorder Association,
<https://add.org/adhd-facts/>



Let the “Spirits” Move You to Be Responsible

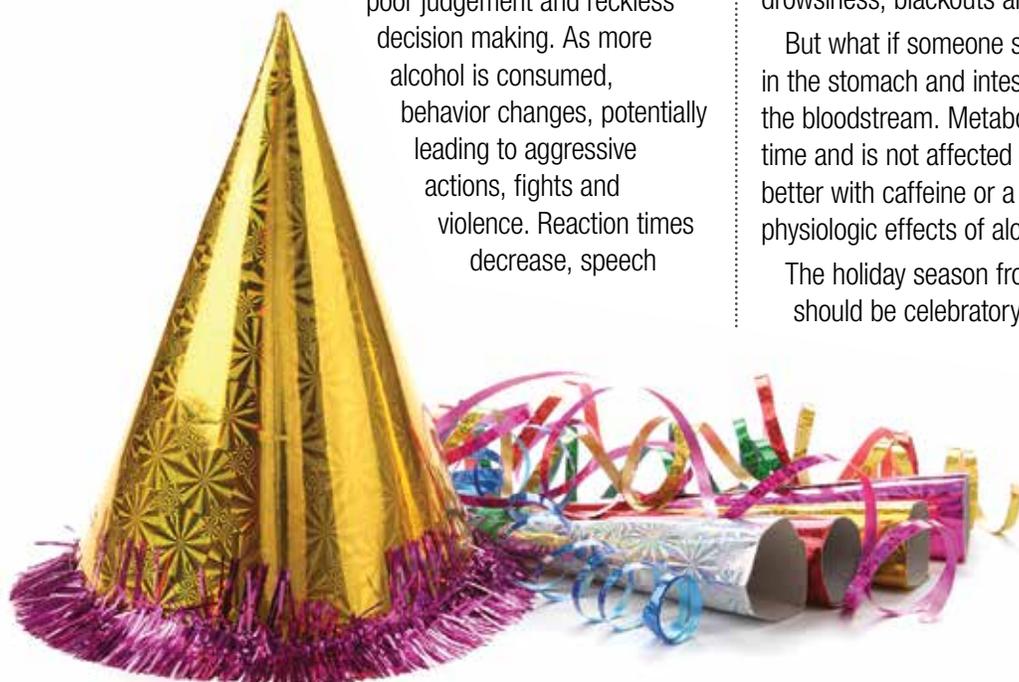
By Dana Rawl, MD, MPH



The definition of “celebration,” the action of marking one’s pleasure at an important event or occasion by engaging in enjoyable, typically social, activity, does not include the words “drunk driving.” A holiday celebration may involve the social activity of consuming an adult beverage, but it does not justify operating a motor vehicle while intoxicated nor does it give anyone an excuse to behave badly.

Year after year, we hear of tragic, preventable events related to alcohol that destroy lives, careers and families. Unfortunately, our current social expectation seems to be that in order to celebrate, one must get inebriated to let his or her hair down, become less inhibited and have fun. Peer pressure is immense, but the consequences of relenting can be permanent and devastating.

The truth about alcohol is that it is initially a stimulant and can be invigorating; however, it quickly creates inhibition, poor judgement and reckless decision making. As more alcohol is consumed, behavior changes, potentially leading to aggressive actions, fights and violence. Reaction times decrease, speech



Drunk-Driving Statistics from Mothers Against Drunk Driving

- ▶ On average, two in three people will be involved in a drunk-driving crash in their lifetime.
- ▶ Every two minutes, a person is injured in a drunk-driving crash.
- ▶ In 2013, 28.7 million people admitted to driving under the influence of alcohol.
- ▶ In 2014, 9,967 people died in drunk-driving crashes — one every 53 minutes — and drunk-driving crashes injured 290,000 people.

becomes slurred, and balance becomes unstable. At higher blood levels, alcohol acts as a depressant and can lead to drowsiness, blackouts and even death.

But what if someone sobers up with coffee or food? Alcohol in the stomach and intestines continues to be absorbed into the bloodstream. Metabolism of alcohol through the liver takes time and is not affected by caffeine or foods. You may feel better with caffeine or a boost in your blood sugar, but the physiologic effects of alcohol are not alleviated.

The holiday season from Thanksgiving through New Year’s should be celebratory and happy but, unfortunately, the season is all too often highlighted by alcohol-related deaths and injuries. Senseless, preventable alcohol-related tragedies should not be part of the holiday conversation.

Enjoy your holidays, but avoid alcohol-related issues. Follow these tips to help protect yourself and others.





A holiday celebration may involve the social activity of consuming an adult beverage, but it does not justify operating a motor vehicle while intoxicated nor does it give anyone an excuse to behave badly.

1. **Say no!** Many people may not normally consume alcohol and may have a very low tolerance. Holiday and peer pressures to engage in drinking can quickly inebriate those individuals.
2. **Have non-alcoholic beverage alternatives.** Make guests feel comfortable choosing a non-alcoholic beverage and have those drinks readily available.
3. **Designate a driver before someone serves alcohol.** Drinking and driving is not an option.
4. **Limit your number.** If you do consume alcohol, predetermine how many drinks you will have and spread them out over time. It's recommended to consume no more than one alcoholic drink per hour. Use non-alcoholic "drink spacers."
5. **The celebration is the purpose, not the alcohol.** Drinking is an option, a responsible choice. If faculties start to fail with alcohol, stop drinking and find someone who is sober to get you home safely. 🍷

References:

<http://psychcentral.com/lib/holiday-drinking-keep-it-safe/>
http://pubs.niaaa.nih.gov/publications/RethinkHoliday/NIAAA_Holiday_Fact_Sheet.pdf



Maintain, Don't Gain: Reducing Holiday Weight Gain

The “Do’s, But Don’ts”

*By Jessica Mango, MS, CHES,
Employee Wellness Coordinator for Lexington Medical Center*

During the summer inferno in central South Carolina, our appetites decrease, and we seem to become more aware of our body image as we shed clothing. Dieting comes easier with the heat and the incentive to look good in a swimsuit. With cooler weather and the upcoming holidays, we tend to put on more clothing and succumb to an elevation in our gastronomic desires. Naturally the hustle-and-bustle distractions of the holiday season and preparations for food, family and friends tend to veer us off our diet and exercise regimen. This year, however, we don't have to get off course.

Did you know the average American gains almost 8 lb throughout the holiday season? Here is a list of “do’s, but don’ts” to help you avoid this extra weight.



Contact Jessica Mango at (803) 791-2513 or visit LMCHHealthDirections.com for more ways to shed pounds and not gain weight during this holiday season. Your body and health will thank you. 🌿

Do	Don't
<p>Eat a 100 to 200 calorie snack before the party: apple and peanut butter; fruit with yogurt; cheese stick and fruit/veggie; handful of almonds; tuna and high-fiber crackers; protein shake.</p> <p>Get some fiber and actual nutrition. Fiber is going to create bulk, which will help you eat less at the party. Start the signal from your stomach to your brain that you are full.</p>	<p>Grab a bag of chips and call it a day.</p>
<p>Treat yourself. Indulge in the one treat you can't get off your mind. Think of it like budgeting money, but budget your calories. What can you afford to indulge in? What is worth the calories?</p> <p>Snack on nutrient-dense foods, such as fruit and veggies, after your treat.</p>	<p>Go overboard and think you might as well go down with the ship.</p>
<p>Keep a food diary. It will help with mindless eating at parties or snacks in the office.</p> <p>Figure out the calories and be honest with yourself. Plan beforehand and look up the calories of your favorite items.</p>	<p>Write snacks down then don't look them up.</p>
<p>Bake your favorite item and portion your servings.</p>	<p>Taste the cake batter or cookie dough, or lick the spoon. This indulgence could cost up to 250 calories.</p>
<p>Store your favorite festive treats in portion-controlled baggies or Tupperware®. (Make sure you prepare fruit and veggies the same way for easy and quick grabbing.) Bring them out for dessert.</p>	<p>Keep treats on the counter and always have them in sight. You will constantly feel tempted to snack on treats if you can always see them. Out of sight, out of mind.</p>
<p>Enjoy one serving of your favorite alcoholic beverage.</p>	<p>Get intoxicated. The more you lose judgment, the more you will get off track and forget about your goals.</p>
<p>Be active every day. Always wager with yourself and use walking as your back up.</p>	<p>Use exercise as an excuse to double your portions. One extra mile does not equate to one slice of pie (maybe one well-proportioned cookie, but not four peanut butter balls).</p>
<p>Be nice to yourself. If you make a mistake, get over it and move on. Do better next time. Go for another run, try a new workout or drink a gallon of water.</p>	<p>Get caught up in the self-loathing snowball. You will want to find comfort to make yourself feel better, which will more than likely have calories.</p>
<p>Eat every four hours or so. Set a timer on your phone.</p>	<p>Skip a meal. Your body goes into starvation mode, and it will want to store the calories you eventually consume around your mid-section.</p>
<p>Bring healthy snacks to work. Bring the veggie or fruit tray. Try making healthier versions of your favorite dishes.</p> <p>Try making your own spread using Greek yogurt as a substitute.</p>	<p>Bring the high-fat dressings and spreads for your veggies.</p>
<p>Enjoy socializing with your friends and co-workers. The more you talk, the less time you have to put food in your mouth.</p> 	<p>Follow the lead of your peers and think its okay to eat the same things. It's easy to convince yourself that you can do what your friends do.</p>



Nurse Practitioner Pearls

Stretching for Wellness

Sitting at a desk or in a vehicle, or standing for hours can cause swelling in your legs and ankles, as well as pain and stiffness in your back, neck, knees, hips and feet. Movement contracts the muscles and improves blood flow, which decreases the amount of blood pooling in the legs and reduces the risk for blood clots. Simple stretches can provide relief from sore, stiff muscles and joints. In addition, stretching can help with relaxation and stress, decrease postural muscle fatigue and improve alertness.

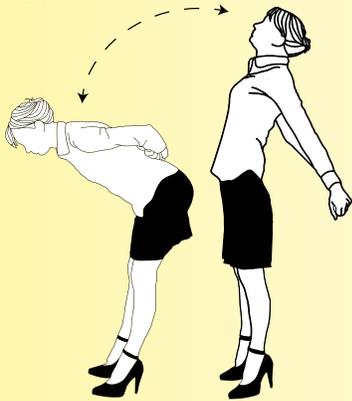
Overall, your muscles and joints were made to move. Prolonged sitting and standing can not only increase risk for significant medical issues, such as blood clots, it can make you feel more tired and less productive. Performing frequent, simple stretching exercises may be the perfect solution to help

Prolonged sitting and standing can not only increase risk for significant medical issues, such as blood clots, it can make you feel more tired and less productive.

you get through the day feeling more relaxed, less sore and more energetic. Your physical and mental health will benefit, and your boss may notice your positive attitude and praise your improved performance.

Consider doing the following stretching techniques throughout the workday. 🌿

1 Back Extension



Repeat 3 times,
5 seconds each.

2 Neck Forward



Do once for 15 seconds.

3 Neck Left & Right



Repeat 3 times,
5 seconds each,
both sides.

4 Elbow Pullover



Repeat 3 times,
5 seconds each,
both sides.

5 Shoulder Over



Do once for 15 seconds
on each side.

6 Shoulder Across



Do once for 15 seconds
with each arm.

7 Shoulder Back



Do once for 15 seconds
with each arm.

8 Bridge Stretch



Do once for a second.

9 Forearm & Wrist



Do once for 15 seconds
with each arm.

10 Hamstring Stretch



Do once for 15 seconds
with each leg.

11 Calf Stretch



Do once for 15 seconds
with each leg.

12 Quad & Flexor Stretch



Do once for 15 seconds
with each leg.

Coronary Calcium Scoring and Cardiac CT Angiography

More Weapons in the Arsenal

By William D. Brearley Jr., MD, FACC, Lexington Cardiology

Cardiovascular disease was the leading cause of death in the United States in 2014, claiming more than 614,000 lives and surpassing cancer related deaths once again.¹ The overall number of heart disease deaths has declined from previous years and decades; however, it remains atop the list. Cardiovascular risk factors including obesity, hypertension, cigarette smoking and diabetes are prevalent in our society and, if present, significantly increase the likelihood that an individual will develop heart disease. According to a study in *The Lancet*, the lifetime risk of developing coronary artery disease after the age of 40 is 49 percent for men and 32 percent for women.²

Key strategies in the war on cardiovascular disease include primary prevention and early detection. In utilizing a primary prevention strategy, physicians and other providers attempt to prevent heart disease before it ever occurs, mainly by modifying cardiovascular risk factors and encouraging patients to make healthy choices regarding diet, exercise and avoidance of tobacco.

With detection, there are several tools available. Historically, exercise electrocardiogram (ECG) stress testing has been used to non-invasively evaluate underlying coronary artery disease since

the 1920s. This method is simple, however, it has limited sensitivity and specificity compared to more modern methods of detection. In addition, it requires the patient to be ambulatory and have an interpretable baseline ECG.

The accuracy and prognostic information provided by routine exercise stress testing was improved significantly in the 1970s with the addition of radiopharmaceuticals and cardiac imaging.³ These nuclear stress tests detect areas of the heart that may not be receiving adequate blood flow, indicating a significant area of obstruction within a coronary artery.

As medical technology has progressed, more advanced cardiac imaging modalities have been developed that have been instrumental in the early detection of coronary artery disease. In the 1980s, the development of electron beam computerized tomography (EBCT) scanning enabled the detection of coronary calcium, which is present in atherosclerotic plaque. These studies detect as well as quantify the amount of calcium present and provide what is known as an Agatston score. A higher Agatston score indicates a larger burden of plaque in the vessel which, in turn, portends a higher likelihood of future cardiac events.⁴

CALCIUM SCORING GUIDELINES		
CALCIUM SCORES	IMPLICATION	RISK OF CORONARY ARTERY DISEASE
0	No identifiable plaque	Very low, less than 5%
1 – 10	Minimal identifiable plaque	Very unlikely, less than 10%
11 – 100	Definite, at least mild atherosclerotic plaque	Mild or minimal coronary narrowing likely
101 - 400	Definite, at least moderate plaque	Mild coronary artery disease highly likely, significant narrowing possible
401 or higher	Extensive atherosclerotic plaque	High likelihood of at least one significant coronary narrowing

Agatston score and associated cardiovascular risk.



Coronary calcium and associated Agatston score.

In the 1990s, multi-slice computed tomography (CT) scanners were developed. This technology was capable of imaging the beating heart. These high-resolution scanners create a three-dimensional rendering of the heart and allow close inspection of the coronary arteries. Areas of soft and hard plaque are identifiable and, in addition, the degree of stenosis or narrowing can be quantified. These scans usually subject the patient to less radiation than a nuclear stress test or diagnostic cardiac catheterization.⁵ In most cases, patients require administration of medications to slow the heart rate, which enables accurate and clear imaging. Contrast administration is also required to visualize the coronary arteries. Coronary CT angiography studies can be performed relatively quickly and at minimal risk to the patient. For those patients with abnormal studies that identify significant areas of obstruction, cardiac catheterization is usually performed and, if indicated, percutaneous coronary intervention with coronary stenting.

Patients identified as having mild or moderate non-obstructive coronary artery disease are started on appropriate medical therapy (aspirin, cholesterol-lowering medications, etc.). It is beneficial for all patients identified as having coronary artery disease to make lifestyle changes, including increasing aerobic activity and adopting a heart-healthy diet. These patients are followed closely over time for the development of any concerning symptoms. In addition, efforts are made to modify cardiovascular risk factors through optimal blood pressure control, normalization of blood sugars in diabetics and aggressive treatment of elevated cholesterol levels.

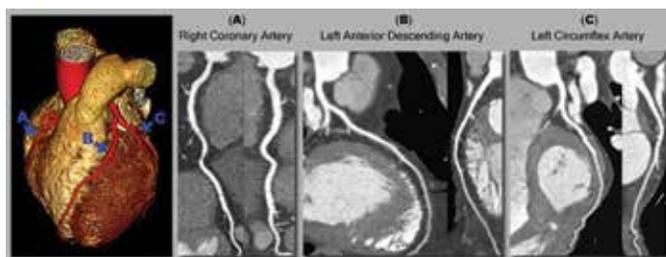
The U.S. Preventive Services Task Force does not recommend routine screening in asymptomatic patients without a history of cardiovascular disease; however, American College of Cardiology guidelines state that coronary calcium scoring may be reasonable in patients who are at intermediate risk for cardiovascular events (6 to 10 percent risk at 10 years based on Framingham Criteria/Risk Calculation).^{6,7}

Calcium scoring and cardiac CTA are also not recommended for higher risk individuals, such as patients who are suspected of having an unstable or acute coronary syndrome.

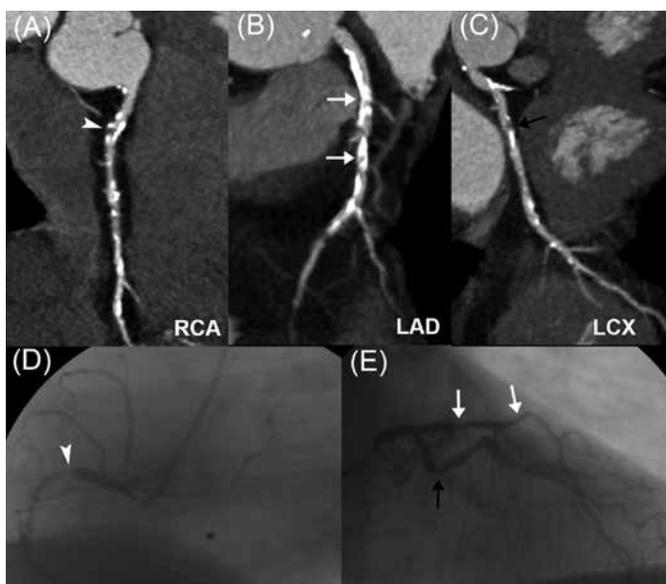
The absolute number of cardiac deaths is declining in the U.S., which is likely attributable to several factors, including a decrease in cigarette smoking, earlier detection of coronary artery disease, advances in medical therapy, and aggressive and definitive treatment of heart attack patients. Cardiovascular risk factors and heart disease, however, are still extremely prevalent in the U.S. and throughout the world. Coronary calcium scoring and cardiac CTA are two of the newer weapons we have in the fight against heart disease and can be very useful tools in appropriate patients. ☺

References:

1. Heron, M. *Deaths: Leading causes for 2014*. National Vital Statistics report; vol 65 no 5. Hyattsville, MD: National Center for Health Statistics.
2. Lloyd-Jones DM, Larson MG, Beiser A, Levy D. *Lifetime risk of developing coronary heart disease*. *The Lancet*. 1999;353:89-92.
3. Vesely MR, Dilsizian V. Nuclear cardiac stress testing in the era of molecular medicine. *J Nucl Med*. 2008; 49:399-413.
4. Hoffman U, Brady TJ, Muller J. Use of new imaging techniques to screen for coronary artery disease. *Circulation*. 2003;108:e50-e53.
5. Mayo JR, Leipsic JA. Radiation dose in cardiac CT. *Amer J of Roentgenology*. 2009; 192: 646-653.
6. Helfland, M. et al. Emerging risk factors for coronary heart disease: a summary of systematic reviews conducted for the U.S. preventive services task force. *Ann Int Med*. 2009; 151:496-507.
7. Goft DC, Lloyd-Jones DM, Bennett G, et al. 2013 ACC/AHA guideline on the assessment of cardiovascular risk: a report of the AHA/ACC task force on practice guidelines. *J Am Coll Cardiol*. 2014;63:2953-2959

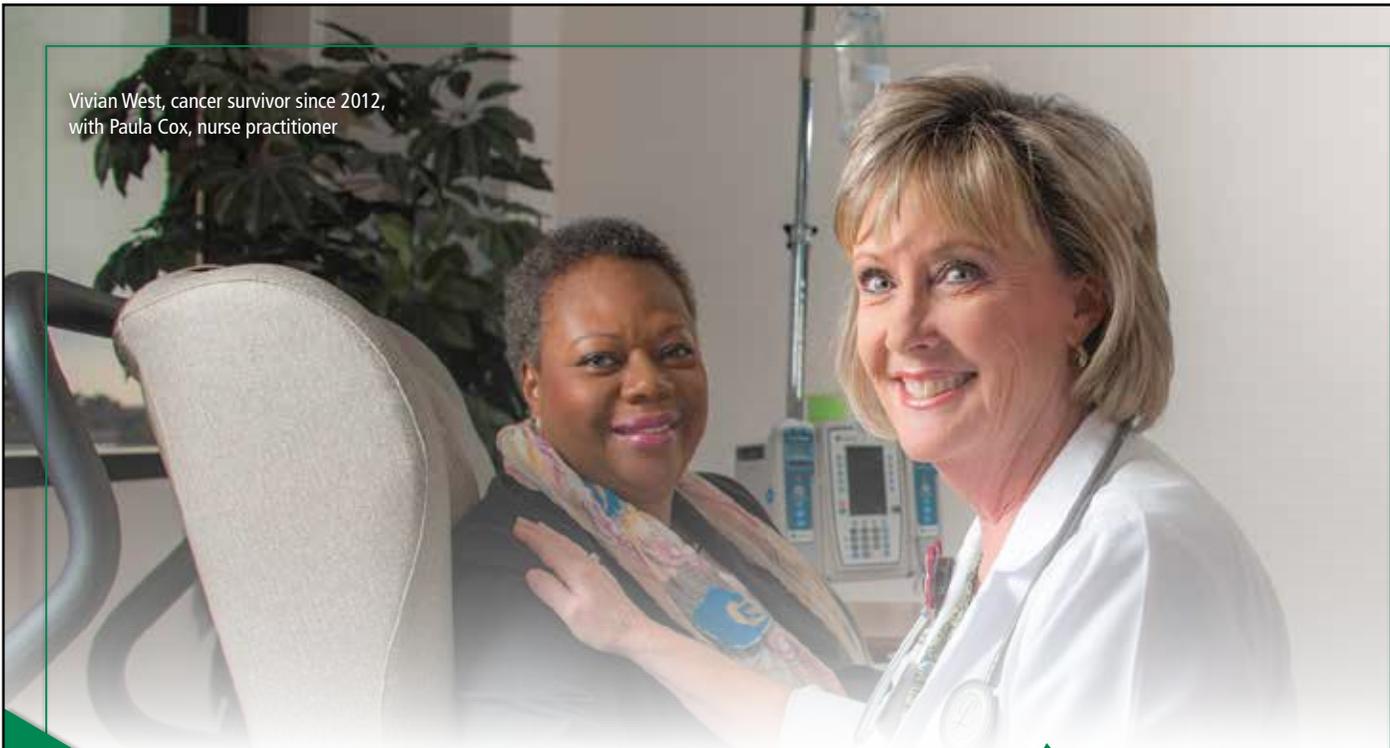


Cardiac CTA with 3-D rendering and specific vessel analysis.



Cardiac CTA findings and correlation with cardiac catheterization.

Vivian West, cancer survivor since 2012,
with Paula Cox, nurse practitioner



It's Our Fight, Too.



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