

The purpose of this quiz is to provide a convenient means for osteopathic physicians to assess their understanding of the scientific content in the June 2012 issue of *JAOA—The Journal of the American Osteopathic Association*.

To apply for 2 Category 1-B continuing medical education (CME) credits, AOA members may take this quiz online at <http://www.osteopathic.org/quiz>, where this and other *JAOA* quizzes can be accessed. Quizzes that are completed online will be graded and credited to members' CME activity reports.

Alternatively, osteopathic physicians can complete the quiz below and mail it to the following address by December 31, 2013:

American Osteopathic Association
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142 E Ontario St
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AOA No. _____

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If you mail or fax this form to the Division of CME, the AOA will record the fact that you have submitted this form for Category 1-B CME credit.

For each of the questions below, place a checkmark in the box provided next to your answer so that you can easily verify your answers against the correct answers, which will be published in the July 2012 issue of the *JAOA*.

Patient-Centered Management of Atrial Fibrillation: Applying Evidence-Based Care to the Individual Patient by Eric D. Good, DO, and Felix J. Rogers, DO

1. Decision-making for stroke prevention in a patient with atrial fibrillation starts with a determination of his or her risk of stroke. The most commonly used scoring system is the CHADS2. All but which of the following patients has a score of at least 3 or more and therefore needs to be on anticoagulation therapy:

- (a) elderly man with diabetes mellitus and recent admission for congestive heart failure attributed to his long-term hypertension
- (b) 50-year-old patient with diabetes mellitus and with prior episode of aphasia and right-sided weakness
- (c) 80-year-old man with blood pressure of 145/95 mm Hg and diabetes
- (d) 76-year-old man with prior transient ischemic attack

- (e) 68-year-old woman with blood sugar level of 145 mg/dL

2. A decision on heart rhythm control in a patient with atrial fibrillation is harder than it might seem at first glance. Which of the following statements is correct:

- (a) Use of an anti-arrhythmic drug to restore sinus rhythm will allow the patient to stop taking warfarin.
- (b) In a patient with atrial fibrillation of uncertain duration, direct current cardioversion can proceed immediately as long as the patient is relatively asymptomatic.
- (c) All efforts should be made to restore sinus rhythm, because that will allow the patient to live longer.
- (d) The primary reason to restore sinus rhythm is to improve quality of life.
- (e) Amiodarone is the anti-arrhythmic drug of choice for all patients because it has the greatest efficacy, can be

used in patients with congestive heart failure and coronary heart disease, and it has a favorable side effect profile with few, if any, drug interactions.

Osteopathic Manipulative Treatment in Pregnant Women by John M. Lavelle, DO

3. Cardiac output can increase 30% to 50% during pregnancy. This stress can cause cardiac decompensation in women with underlying heart disease during the latter half of pregnancy. Osteopathic manipulative treatment to which of the following anatomic areas may help control the symptoms of overstimulation of the vagus on the heart:

- (a) cervical spine, C1-C3
- (b) thoracic spine, T6-T8
- (c) cervical spine, C5-C7
- (d) thoracolumbar junction, T12-L1

Empathy in Osteopathic Medical Students:

A Cross-Sectional Analysis by Marilyn Kimmelman, EdD; Jackie Jacobbe, MEd; Justin Faden, DO; Geetha Kumar, MD, FAPA; Charlyene C. Pinckney, MS; and Robert Steer, EdD

4. A higher level of empathy in physicians has been correlated with which of the following:

- (a) increased patient engagement in care
- (b) patient compliance with therapy
- (c) more accurate physician diagnoses
- (d) better patient outcomes
- (e) all of the above

5. Some researchers have reported that there is a decline in empathy among allopathic medical students as they progress through their medical school education, but especially...

- (a) during first-year orientation.
- (b) between the first and second year.
- (c) between the second and third year.
- (d) between the third and fourth year.
- (e) between graduation and residency.

6. Which of the following strategies is suggested for improving empathy:

- (a) communication skills training
- (b) mentoring lectures
- (c) meditation training
- (d) using literature and the arts
- (e) all of the above

Survey of Billing and Coding for Counterstrain Tender Points by Karen T. Snider, MS, DO, and Jane C. Johnson, MA

7. The Centers for Medicare & Medicaid Services (CMS) 1995 coding guide divides the body into distinct physical examination areas for the determination of evaluation and management service codes. How many body areas does CMS recognize in the 1995 coding guide?

- (a) 2
- (b) 4
- (c) 6
- (d) 8
- (e) 10

8. The CMS 1997 coding guide limits the use of body areas to the physical examination of which of the following organ systems?

- (a) musculoskeletal
- (b) lymphatic
- (c) cardiovascular
- (d) skin

Coexistence of Cushing Syndrome From Functional Adrenal Adenoma and Addison Disease From Immune-Mediated Adrenalitis by Randall Colucci, DO; Rafael E. Jimenez, MD; William Farrar, MD; Ramiro Malgor, MD; Leonard Kohn, MD; and Frank L Schwartz, MD

9. If adrenal-dependent Cushing syndrome is suspected, 1 of the first tests a physician should strongly consider ordering is which of the following:

- (a) ultrasensitive TSH
- (b) serum corticotropin
- (c) 24-hour urinary free cortisol
- (d) serum catecholamines
- (e) none of the above

10. Addison disease is a form of adrenal insufficiency that can occur either by itself or with other autoimmune polyendocrine syndromes. In most patients with primary Addison disease, 1 very common finding is autoantibodies against which of the following:

- (a) 11-deoxycortisol
- (b) Scl-70
- (c) 17-hydroxylase
- (d) 21-hydroxylase
- (e) adrenal cortical antigen ♦

Answers to May 2012 JAOA CME Quiz

Discussion answers to *JAOA* continuing medical education quizzes appear only when authors have included discussions with the quiz questions and answers they must provide to meet the requirement for submission to and publication in the *JAOA*.

Cardiac Computed Tomographic Angiography and the Primary Care Physician by J. Ronald Mikolich, MD

1. **(d)** Coronary computed tomographic angiography (CTA) typically acquires images of the coronary arteries best during the end diastole phase of the cardiac cycle.
2. **(c)** Patients with a body mass index higher than 40 would *not* be good candidates for coronary CTA.
3. **(a)** Pre-authorization of a coronary CTA by a radiology benefit manager (RBM) is *most likely* for a clinical scenario of chest pain with an intermediate Framingham Risk Score.
4. **(b)** In the performance of a coronary CTA, a β -blockade to lower the heart rate to less than 65 beats per minute is most commonly used.

Efficacy of Osteopathic Manipulative Treatment for Low Back Pain in Euhydrated and Hypohydrated Conditions: A Randomized Crossover Trial by Justine Parker, OMS IV; Kurt Heinking, DO; and Robert Kappler, DO

5. **(a)** The majority of primary care patients with low back pain (LBP) show substantial improvement in the first month after symptoms appear, independent of intervention, thus making it difficult to demonstrate the value of osteopathic manipulative treatment or any other therapy in patients with acute symptoms.
6. **(c)** Patients who are hydrated during osteopathic manipulative treatment have greater improvement in their diagnosed areas of somatic dysfunction and a greater number of resolved asymmetrical landmarks on the standing structural examination than when hypohydrated.

Iliacus Tender Points in Young Adults: A Pilot Study by Ying Liu, PhD, MS, and Joy L. Palmer, DO

7. **(b)** The iliacus tender point is located deep in the iliacus fossa, approximately 2 inches medial and slightly caudal to the anterior superior iliac spine. Although the iliacus muscle spans from the lumbar spine to the femur, the identified tender point is located anteriorly deep in the iliac fossa, not in the posterior pelvic musculature, not medial to the anterior inferior iliac spine (anterior L2 tender point), and not along the superior aspect of the pubic ramus.
8. **(a)** The iliopsoas muscle has been shown to refer pain into the lower abdomen, groin, buttocks, lower extremity, hip, lower back (from thoracolumbar junction to lumbosacral junction), or sacroiliac joint.

Fatal Venous Thromboembolism After Splenectomy: Pathogenesis and Management by Linda P. Ha, DO, and Mark Arrendondo, MD

9. **(b)** Low molecular weight heparin, a venous thrombosis treatment modality, has been shown to have an antitumor effect in patients with cancer and venous thromboembolism.

Efficacy of a Physician's Words of Empathy: An Overview of State Apology Laws by Nicole Saitta, MA, and Samuel D. Hodge, Jr, JD

10. **(d)** A physician may remain silent in the event of an adverse medical outcome because he or she is unaware of error, he or she decides to avoid the situation because of improper training on delivering bad news, or her or she is afraid of a legal reprisal.
11. **(a)** Studies have demonstrated that the benefits of an apology in the wake of an adverse medical outcome include decreased financial consequences resulting in litigation. ♦