

The purpose of this quiz is to provide a convenient means for osteopathic physicians to assess their understanding of the scientific content in the October 2011 issue of *JAOA—The Journal of the American Osteopathic Association*.

To apply for 2 hours of Category 1-B continuing medical education (CME) credit, 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 April 30, 2013:

**American Osteopathic Association
Division of CME
142 E Ontario St
Chicago, IL 60611-2864
Fax: (312) 202-8202**

AOA No. _____

Full Name _____

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 November 2011 issue of the *JAOA*.

Developmental and Persistent Developmental Stuttering: An Overview for Primary Care Physicians by John V. Ashurst, DO, and Megan N. Wasson, DO

1. A 24-month-old boy is brought into his primary care physician's office by his mother because he has exhibited difficulty with speech. The mother notes that her son has repetition of sounds and words at the beginning of his sentences. She states that this repetition occurs approximately once every 10 sentences and is worse when the child is tired or excited. What type of dysfluency does the patient have?

- ☐ (a) normal dysfluency
- ☐ (b) mild stuttering
- ☐ (c) moderate stuttering
- ☐ (d) severe stuttering

2. An 18-year-old man has been seeing a speech therapist for a speaking dysfluency for several years without remission. Which of the following stuttering diagnoses is most likely appropriate for this patient's condition:

- ☐ (a) developmental
- ☐ (b) persistent developmental
- ☐ (c) neurogenic
- ☐ (d) psychogenic

Osteopathic Distinctiveness in Osteopathic Predoctoral Education and Its Effect on Osteopathic Graduate Medical Education by Leslie Mae-Geen Ching, DO, and William J. Burke, DO

3. Which of the following is *not* a common reason for osteopathic med-

ical students to choose allopathic residencies:

- ☐ (a) location of residency
- ☐ (b) in certain specialties, a limited number of osteopathic residency positions
- ☐ (c) perceived higher quality of training in allopathic residencies
- ☐ (d) perceived increased career opportunities resulting from training at allopathic residencies
- ☐ (e) all of the above

Sacral Stress Fracture in a Distance Runner by Leamor Kahanov, MS, EdD, ATC; Lindsey Eberman, MS, PhD, ATC; Thurman Alvey, DO; Joshua True, MA, ATC; and Brad Yeargin, MEd, ATC

4. Which of the following is the salient feature in the differential diagnosis of a sacral stress fracture:

- ☐ (a) pain during a hop test
- ☐ (b) amenorrhea
- ☐ (c) sacral pain during hip flexion
- ☐ (d) pain during load-bearing activity

5. Predisposing factors to sacral stress fractures include which of the following:

- ☐ (a) increase in the volume of training
- ☐ (b) change in shoe type
- ☐ (c) change in terrain
- ☐ (d) a and c
- ☐ (e) all of the above ♦

Answers to September 2011 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*.

An Osteopathic Approach to Type 2 Diabetes Mellitus by Jay H. Shubrook, Jr, DO

1. **(e)** Even small amounts of activity can improve glucose control; moderate to intense physical activity can improve glucose for up to 72 hours; the combination of aerobic activity and resistance training is even better than either alone in terms of glucose control; and physical activity is better at preventing diabetes than managing it.

2. **(c)** People with type 1 diabetes mellitus are at risk for hypoglycemia and have relatively strict parameters regarding high and low glucose with exercise. Those with type 2 diabetes mellitus are at much lower risk. The risk is greater for those with type 2

diabetes mellitus if they are on a treatment that can cause lows. These patients should always check their glucose before exercising.

3. **(c)** Limited joint mobility syndrome (diabetic cheiroarthropathy) is a commonly overlooked musculoskeletal complication of diabetes mellitus. The complications of degenerative disk disease of the thoracic spine, osteoarthritis of the knee, and ankle joint laxity have not been identified to be related to diabetes mellitus.

Contribution of Osteopathic Medicine to Care of Patients With Chronic Wounds by Dana C. Anglund, DO, and Millicent King Channell, DO

4. **(e)** Thoracic duct flow, infections, mobilization of immune cells, and wound healing have all been demonstrated to be affected by lymphatic osteopathic manipulative treatment techniques.

Ultrasonography-Guided Osteopathic Manipulative Treatment for a Patient With Thoracic Outlet Syndrome by Benjamin M. Sucher, DO

5. **(c)** Osteopathic manipulative treatment for patients with thoracic outlet syndrome (TOS) can be directly

imaged by means of ultrasonography during treatment to confirm the manipulating hand is in contact with the pectoralis minor muscle.

6. **(a)** The pectoral bowing ratio is measured by means of ultrasonography to help diagnose TOS. This ratio confirms successful manipulative treatment of TOS if it decreases to below 10%.

Elevated Chromium Levels and Prosthetic Joint Implants by James W. Price, DO

7. **(e)** Perforation of the nasal septum, skin ulcerations, occupational asthma, and lung cancer are all associated with toxic levels of chromium.

8. **(b)** Cr(VI) is a toxic form of chromium.

9. **(e)** Industrial sources of chromium exposure include paint pigments, stainless steel, and mining operations. ♦

Rapid Review

JAOA—The Journal of the American Osteopathic Association considers manuscripts for rapid review when appropriate. Authors must justify their rapid review requests in their cover letters. Rapid review is reserved primarily for original contributions of high importance to the osteopathic profession. However, the editor in chief will assess each rapid review request on a case-by-case basis.

For more information on submitting manuscripts to the *JAOA*, visit <http://www.jaoa.org/misc/fora.shtml>.