



The Journal of the American Osteopathic Association

The purpose of this quiz is to provide a convenient means for osteopathic physicians to assess their understanding of the scientific content in the November 2015 issue of *The Journal of the American Osteopathic Association (JAOA)*.

To apply for 2 Category 1-B continuing medical education (CME) credits, AOA members may take this quiz online at <https://www.osteopathic.org/docmeonline>, 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 May 31, 2017:

American Osteopathic Association
Division of CME Policy & Accreditation
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If you mail or fax this form to the Division of CME Policy & Accreditation, the AOA will record the fact that you have submitted this form for Category 1-B CME credit. Osteopathic physicians who are not members of the AOA and who forward hard copies of completed JAOA quizzes to the Division of CME Policy & Accreditation will be charged a fee of \$25 per quiz for staff time to grade the quiz, record the credits, and provide a letter to the osteopathic physician as documentation.

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 December 2015 issue of the JAOA.

Feasibility of Using Ultrasonography to Establish Relationships Among Sacral Base Position, Sacral Sulcus Depth, Body Mass Index, and Sex

Michael D. Lockwood, DO;
Tatyana Kondrashova, MD, PhD;
and Jane C. Johnson, MA

- In the current study, the sacral base position depended on which of the following factors?
 - (a) age
 - (b) left or right side
 - (c) body mass index
 - (d) ethnicity
- Ultrasonography can be most efficiently used to evaluate which of the following?
 - (a) asymmetry of body landmarks
 - (b) lymphatic flow
 - (c) differentiating between age groups
 - (d) cortical bone density

Incidence of Somatic Dysfunction in Healthy Newborns

Erica L. Waddington, DO;
Karen T. Snider, DO;
Michael D. Lockwood, DO;
and Vanessa K. Pazdernik, MS

- In a study of the incidence of somatic dysfunction of the cervical, lumbar, sacral, and cranial regions of newborns, which of the following was found to be statistically significantly correlated with the total amount of somatic dysfunction identified (somatic dysfunction severity score)?
 - (a) duration of labor
 - (b) labor augmentation
 - (c) maternal parity
 - (d) mode of delivery
 - (e) type of anesthesia

Pigmented Skin Lesion Biopsies After Computer-Aided Multispectral Digital Skin Lesion Analysis

Richard R. Winkelmann, DO;
Natalie Tucker, BS; Richard White, MS;
and Darrell S. Rigel, MD, MS

- What percentage of patients present to their primary care physician with at least 1 skin problem?
 - (a) 0%-25%
 - (b) >25%-50%
 - (c) >50%-75%
 - (d) >75%-100%
- According to estimates, what percentage of pigmented skin lesions biopsied in the United States are found to be positive for melanoma?
 - (a) 7%
 - (b) 15%
 - (c) 30%
 - (d) 60%
- What is the 5-year survival rate for patients with advanced, metastatic melanoma?
 - (a) <10%
 - (b) 40%
 - (c) 70%
 - (d) 99%
- What are the "ABCDEs" of melanoma that clinicians look for when evaluating a suspicious pigmented skin lesion?
 - (a) asymmetry, border regularity, color variegation, diameter >10 mm, recent evolution
 - (b) asymmetry, border irregularity, color variegation, diameter >6 mm, recent evolution
 - (c) asymmetry, border irregularity, color variegation, diameter >10 mm, recent evolution
 - (d) asymmetry, border regularity, color variegation, diameter >6mm, recent evolution

Achilles Tendon Disorders

Sundeep S. Saini, DO;
Christopher W. Reb, DO;
Megan Chapter, DO; and
Joseph N. Daniel, DO

8. A 58-year-old male cyclist presents to his primary care physician with the complaint of right posterior heel pain. He states that the pain is worst in the morning on rising. Physical examination reveals swelling and tenderness on palpation over the insertion site of the Achilles tendon. In addition, preliminary radiographs demonstrate a discernible Haglund deformity. What is the most likely diagnosis?
- (a) right ankle sprain
 - (b) calcaneal tuberosity stress fracture
 - (c) noninsertional Achilles tendinosis
 - (d) insertional Achilles tendinosis
 - (e) retrocalcaneal bursitis
9. Which modality has been shown to be the best nonoperative approach to midportion noninsertional Achilles tendinosis?
- (a) strict nonweight bearing and rest
 - (b) ice therapy
 - (c) eccentric exercises
 - (d) splinting
 - (e) steroid injections

10. A 23-year-old woman presents to her primary care physician with posterior ankle swelling and crepitus. She states that she typically runs 10 miles a day and that the pain has limited her ability to continue this activity. She has had some relief from nonsteroidal anti-inflammatory drugs, but she is concerned about the “sausagelike” mass on the posterior aspect of her ankle. What is the most likely diagnosis?
- (a) paratenonitis
 - (b) retrocalcaneal bursitis
 - (c) acute Achilles tendon rupture
 - (d) noninsertional Achilles tendinosis
 - (e) Haglund deformity

**Learning With Reflection:
Practices in an Osteopathic
Surgery Clinical Clerkship
Through an Online Module**

Kadriye O. Lewis, EdD;
Susan Farber, EdD; Haiqin Chen, PhD;
and Don N. Peska, DO, MEd

11. Sharing vital information with peers in an effort to derive a diagnosis or treatment to produce the best outcome is an example of:
- (a) content reflection
 - (b) contextual reflection
 - (c) dialogic reflection
 - (d) personal reflection

12. Reflective practices enable the application of gained knowledge, skills, and behaviors to medical practice. An example of reflective practices is:

- (a) transformative learning
- (b) inductive learning
- (c) deductive learning
- (d) intuitive learning

Earn CME Credits Online

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Answers to the October 2015 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.

Accuracy and Adequacy of Computed Tomography–Guided Lung Biopsies: Experience From a Community Hospital

Barbara D. Florentine, MD;
Richard J. Helton, DO;
Michael M. Mitchell, DO;
Kara E. Schmidt, DO;
and David B. Kozlov, MD

1. (b) The pathologist must make certain that sufficient tissue from computed tomography (CT)–guided percutaneous biopsies is available for potential molecular analysis in primary lung adenocarcinoma because most patients are at an advanced stage of their disease and the biopsy specimen is commonly the only tissue available for such tests.
2. (b) Intraprocedural CT cytologic evaluation of a lung sample increases the likelihood of adequacy of the sample and appropriate triage.
3. (c) A team approach using a standard protocol optimizes the chance of a successful CT-guided lung biopsy specimen because a successful outcome of the procedure relies heavily on the interaction and expertise of those involved in the process.

Quantification of Motion Palpation

Hervé Kasparian, DO (France);
Ghislaine Signoret, DO (France);
and Jérôme Kasparian, PhD

4. (b) The magnitude of anteroposterior cranial expansion in young adult study participants was reported as 10 to 50 μm .

Non–Vitamin K Antagonist Oral Anticoagulants:

The Clinician's New Challenge

Brian K. Yorkgitis, PA-C, DO;
Jeanette Zhang, MD; and
Joseph F. Rappold, MD

5. (b) Dabigatran is primarily excreted through the renal system.
6. (a) For minor procedures without expected clinically significant bleeding, non–vitamin K antagonist oral anticoagulants should be discontinued 18 to 24 hours before the procedure. For procedures with minor risks of bleeding, the agents should be held for at least 24 hours beforehand. For procedures with moderate risk of bleeding or high risk of bleeding, the agents should be held at least 48 hours or 72 hours beforehand, respectively.

7. (a) Edoxaban and direct thrombin inhibitor are the incorrect combination of drug and mechanism of action. Edoxaban, apixaban, and rivaroxaban are factor Xa inhibitors. Dabigatran is a direct thrombin inhibitor.
8. (d) Dabigatran and edoxaban require at least 5 days of parenteral anticoagulation before the management of venous thromboembolism.

Peroneus Longus Rupture at Its Origin Managed With Platelet Rich Plasma

Britney Else, DO; T. Jeffery Emel, MD;
Thomas Kern, MD; Lamont E. Cavanagh, MD;
and Thomas W. Allen, DO, MPH

9. (d) Tears of the peroneal muscle-tendon complex rarely occur at the lateral malleolus. Published reviews of peroneal ligament tears found the majority of tears at or distal to the lateral malleolus. Tears at the muscle-tendon junction have rarely been reported.