Journal of
Surgical Orthopaedic Advances

ANNOUNCEMENTS

Online Manuscript Submission: To read the Author Instructions and to submit a manuscript to JSOA for publication consideration, please go to the JSOA manuscript submission Website (http://jsoa.msubmit.net/). All first-time visitors will need to register and are strongly encouraged to read the Author Instructions before logging in.

CME: Free CME is being offered as a member benefit to active members of the Southern Orthopaedic Association (SOA), Eastern Orthopaedic Association (EOA), Western Orthopaedic Association (WOA), the Society of Military Orthopaedic Surgeons (SOMOS), and Maryland Orthopaedic Association (MOA). Through the joint sponsorship of ProScan Imaging Education Foundation (PIEF) and SOA, Volume 24 participants will receive a maximum of 6 *AMA PRA Category-1 credits*™ per issue for each correctly completed CME Answer Form. (See CME Questionnaire for more details.)

Indices: In an effort to make more pages available for journal articles, the indices (appearing in issue number 4) have been made available online on the JSOA website beginning with Volume 21.

2015

The **Southern at the SEC Sports Medicine Symposium** will be held at the Inn at Opryland in Nashville, Tennessee on March 12–14, 2015. Go to www.soaassn.org for more information.

The **Southeastern Hand Club's** 2015 Annual Meeting is scheduled for April 23–26, 2015 at The Cloister in Sea Island, Georgia. For more information, visit www.sehandclub.com.

The **Virginia Orthopaedic Society's** 68th Annual Meeting will take place on April 24–26, 2015 at The Homestead in Hot Springs, Virginia. Go to www.vos.org for more information.

The **Florida Orthopaedic Society** will hold its 2015 Annual Scientific Meeting on June 4–7, 2015 in St. Petersburg, Florida. For more information, go to www.floridaorthopediccommunity.com.

The **Eastern Orthopaedic Association's** 46th Annual Meeting is tentatively scheduled for June 17–20, 2015 at the Grand Wailea in Maui, Hawaii. To learn more, go to www.eoa-assn.org.

The **Michigan Orthopaedic Society** will hold its 2015 Annual Scientific Meeting on June 18–21, 2015 on Mackinac Island in Michigan. For more information, visit www.mosonline.org.

The **Southern Orthopaedic Association's** 32nd Annual Meeting will be held on July 15–18, 2015 at the Grove Park Inn in Asheville, North Carolina. For more information, visit www.soaassn.org.

The **Western Orthopaedic Association** will hold its 79th Annual Meeting in Coeur d'Alene, Idaho on July 29–August 1, 2015. Go to www.woa-assn.org for more information.

The **Clinical Orthopaedic Society** will hold its 103rd Annual Meeting on September 24–26, 2015 at The Westin Times Square in New York, New York. www.cosociety.org.

The **Society of Military Orthopaedic Surgeons** will hold its 57th Annual Meeting on December 7–11, 2015 at The Vinoy Renaissance in St. Petersburg, Florida. For information, please visit www.somos.org.

Journal of Surgical Orthopaedic Advances

CONTINUING MEDICAL EDUCATION QUESTIONNAIRE

The *Journal of Surgical Orthopaedic Advances* CME program was designed for physicians in the specialty of orthopaedic and trauma surgery. *This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of ProScan Imaging Education Foundation (PIEF) and the Southern Orthopaedic Association. PIEF is accredited by the ACCME to provide continuing medical education for physicians.*

PIEF designates this educational activity for a maximum of 16 *AMA PRA Category 1 Credit(s)*™. Physicians should only claim credit commensurate with the extent of their participation in the activity. To obtain category-1 credit, follow the instructions on the answer sheet.

Objectives: After completing each issue of the *Journal of Surgical Orthopaedic Advances* Continuing Medical Education (CME) instructional media program, the learner should be better able to: identify new techniques and procedures in orthopaedics; cite ongoing activities of interest to orthopaedists; and describe the medical knowledge, clinical procedures, and experiences of physicians.

The *Journal of Surgical Orthopaedic Advances* CME program is intended to be a 24-credit-per-year program. Each issue will have questions of Board Examination quality in a four-part (A–D), multiple-choice format. Participants of Volume 24, Number 1 will receive a maximum of 6 category-1 credits for a correctly completed CME Answer Form submitted to Data Trace Publishing Company for scoring. There is a per issue charge for scoring and processing, payable at the time the answer sheet is submitted.

In order to qualify for CME credit, a score of 70% or more must be achieved on the written examination material. Any participant who does not pass the first time may take the exam one additional time. A new test must be submitted to Data Trace Publishing with a fee of $25. Data Trace Publishing Company will score the tests and notify participants of their scores within 30 days. You will be responsible for notifying your state of the number of credits you have received.

INSTRUCTIONS: The following questions are based on the material presented in the journal issue. Please select the best answer and mark the appropriate box on the CME Answer Form which follows. *The Answer Form, accompanied by your payment, should be returned for scoring to Director of Continuing Education, Data Trace Publishing Company, P.O. Box 1239, Brooklandville, MD 21022-9978 or faxed to 410-823-6898.*

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CME QUESTIONS

1. Complications related to steroid injection into the carpal tunnel include all of the following except:
   A. Nerve puncture or laceration
   B. Bleeding and hematoma formation
   C. Seizure disorder
   D. Precipitation and mass effect of injected steroid reagent

2. What complication poses a serious threat to patients after receiving arthrodesis of the distal interphalangeal joint (DIPJ) using percutaneous K-wires?
   A. Pin tract infections and osteomyelitis
   B. Nail bed injury
   C. Distal skin necrosis
   D. Poor circulation in digit

3. Which of the following is a complication that can follow arthrodesis of the DIPJ with a headless compression screw?
   A. Pin tract infection
   B. Significant interruption of activities of daily living caused by protruding hardware
   C. Osteoarthritis of the DIPJ
   D. Nail bed injury

4. In regard to superficial skin infections, the study by Goldin and Alander demonstrated which of the following?
   A. A significantly higher rate of infection in obese patients
   B. A significantly higher rate of infection in healthy weight patients
   C. Absolutely no difference in rates of infection
   D. A slightly higher rate in the obese group that was not statistically significant

5. In the study by Goldin and Alander, healthy weight patients demonstrated all of the following when compared with severely obese patients except:
   A. Decreased blood loss
   B. Shorter length of hospital stay
   C. Decreased operative times
   D. Increased narcotic use after 6 weeks postoperatively

6. According to the article by Selvam et al., what was a benefit of intramedullary fixation identified by MacAusland et al. in 1942?
   A. Reduced operation time
   B. Reduced need for postoperative hardware removal
   C. Improved long-term joint mobility
   D. Expedited bone fusion

7. Which of the following statements is true?
   A. The U.S. military discourages the use of liberal fasciotomies in theater because of their high morbidity.
   B. Because of improved protective equipment, the number of extremity injuries in the current conflicts of Iraq and Afghanistan is significantly less compared with previous conflicts.
   C. Wounded soldiers may develop acute compartment syndrome during medical evacuation flights.

D. Education programs have resulted in fewer fasciotomies in theater.

8. Which of the following statements regarding periarticular infiltration technique is true?
   A. Injections must be performed only after the wound closure.
   B. An 18-gauge, 4-inch-long spinal needle should be used for all injections.
   C. Optimal infiltration technique involves injection only in the wound edge.
   D. The infiltration technique involves the use of a fanning technique.

9. Which of the following statements regarding periarticular infiltration is false?
   A. Optimal injection solution would include 266 mg (20 mL) of liposomal bupivacaine combined with 30 mL of 0.25% bupivacaine with epinephrine.
   B. Thirty milligrams of ketorolac may be added to the injection solution.
   C. Liposomal bupivacaine should be combined with 1% lidocaine with epinephrine for optimal onset of analgesia.
   D. Liposomal bupivacaine may be diluted with 0.9% saline if extra volume is needed.

10. Which of the following is a significant, independent risk factor for multiple drainage procedures for finger infections?
    A. Methicillin-resistant *Staphylococcus aureus* (MRSA)
    B. Prior antibiotic usage
    C. Smoking
    D. Initial drainage in the emergency department

11. All of the following antibiotics are effective against community-acquired MRSA except:
    A. Clindamycin
    B. Rifampin
    C. Trimethoprim/sulfamethoxazole
    D. Nafcillin

12. Which of the following is a drawback of acetate templating?
    A. Need for computer
    B. High cost
    C. Inaccurate magnification
    D. Limited supply of templates

13. In the article by Barnes et al., which one of the following was not a reason for creating a second-generation medial pivot knee design?
    A. Adding smaller component size increments allowing surgeons to be more precise when gap balancing intraoperatively
    B. Moving the deepest part of the polyethylene 3 mm posteriorly when compared to the early design allowing the femur to remain more posterior and, in effect, decrease impingement on flexion
    C. Extending the femoral implant constant radius from -45° to 100° as opposed to 0° to 90° to allow the femur to maintain contact with the tibia throughout the range of motion
    D. Reducing the depth of the patellofemoral groove to improve patellar tracking

14. Histopathologic findings that have been associated with failed metal-on-metal total hip arthroplasties include which of the following?
    A. A dense perivascular lymphocytic infiltrate
    B. Proliferating irregular spindle-shaped cells with osteoid production
    C. Dense areas of activated macrophages
    D. A neutrophil polymorph infiltrate

15. Histopathologic findings that have been associated with periprosthetic hip arthroplasty infection include which of the following?
    A. A dense perivascular lymphocytic infiltrate
    B. Proliferating irregular spindle-shaped cells with osteoid production
    C. Dense areas of activated macrophages
    D. A neutrophil polymorph infiltrate

16. A trauma patient with a suspected cervical spine injury presents to the emergency room. What is the next appropriate step in the workup of this patient to rule out an unstable spine injury?
    A. Noncontrast head and neck computed tomography (CT) scans
    B. Head and neck CT angiogram
    C. Full physical exam with advanced imaging only if the patient does not fit criteria for ruling out injury based on clinical guidelines
    D. Flexion and extension views of the cervical spine

17. The use of musculoskeletal ultrasound across multiple specialties has recently _____.
    A. been increasing
    B. been decreasing
    C. remained unchanged
    D. become obsolete

18. The following are all characteristics of adhesive capsulitis except:
    A. Fibrosis
    B. Inflammation
    C. Intra-articular adhesions
    D. Thickening of capsule in rotator cuff interval

19. Delayed diagnosis of Achilles tendon rupture is more common in which group of patients?
    A. Athletes
    B. Greater than 55 years of age
    C. Females
    D. Younger than 55 years of age

20. Which of the following statements is true regarding Lisfranc ligament injuries?
    A. The dorsal component of the Lisfranc ligament is relatively weak and tears generally progress sequentially though the dorsal, interosseous, and plantar components.
    B. The dorsal component of the Lisfranc ligament is relatively stronger than the plantar component, resulting in plantar dislocation and subluxation.
    C. The interosseous ligament extending between the bases of the first and second metacarpals is often the first ligament injured in high-impact injuries.
    D. Injury to the Lisfranc ligament is relatively common.

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CONTINUING MEDICAL EDUCATION ANSWER FORM

Expiration: Your completed form and payment for the set of questions in Volume 24, Number 1 must be received by **March 1, 2016**.

Choose one:

- ❑ Active SOA Member (Take exams free)
- ❑ Active EOA Member (Take exams free)
- ❑ Active WOA Member (Take exams free)
- ❑ Active SOMOS Member (Take exams free)
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INSTRUCTIONS: Please return the answer form with payment to Data Trace Publishing Company for grading. You will be notified of the results within 30 days by return mail. Any questions or inquiries regarding the *Journal of Surgical Orthopaedic Advances* Continuing Education Program should be directed to:

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Data Trace Publishing Company
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Brooklandville, MD 21022-9978
Phone 410-494-4994 or fax 410-823-6898

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1. ☐ A ☐ B ☐ C ☐ D	**2.** ☐ A ☐ B ☐ C ☐ D	**3.** ☐ A ☐ B ☐ C ☐ D	**4.** ☐ A ☐ B ☐ C ☐ D	**5.** ☐ A ☐ B ☐ C ☐ D	**6.** ☐ A ☐ B ☐ C ☐ D
7. ☐ A ☐ B ☐ C ☐ D	**8.** ☐ A ☐ B ☐ C ☐ D	**9.** ☐ A ☐ B ☐ C ☐ D	**10.** ☐ A ☐ B ☐ C ☐ D	**11.** ☐ A ☐ B ☐ C ☐ D	**12.** ☐ A ☐ B ☐ C ☐ D
13. ☐ A ☐ B ☐ C ☐ D	**14.** ☐ A ☐ B ☐ C ☐ D	**15.** ☐ A ☐ B ☐ C ☐ D	**16.** ☐ A ☐ B ☐ C ☐ D	**17.** ☐ A ☐ B ☐ C ☐ D	**18.** ☐ A ☐ B ☐ C ☐ D
19. ☐ A ☐ B ☐ C ☐ D	**20.** ☐ A ☐ B ☐ C ☐ D				

Overall Evaluation

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
Presented objective, balanced, and scientifically rigorous content	5	4	3	2	1
Written in an easily understandable manner	5	4	3	2	1
Achieved stated objectives and satisfied my educational need	5	4	3	2	1
Will enhance performance of my duties and improve my practice/professional outcome	5	4	3	2	1
Presented free of commercial bias	5	4	3	2	1

What change(s) (if any) do you plan to make in your practice as a result of reading this issue:

_____

_____

Needs Assessment
Clinical topic/experience that most needs to be addressed in future JSOA articles is_____

_____