

New England College of Occupational and Environmental Medicine Conference 2019

ABPM MAINTENANCE OF CERTIFICATION (MOC) – QUESTIONS

***** Your answers must be written on the Attendance Verification form *****

The Attendance Verification Form may be submitted at the registration area at the end of your conference stay or sent to necoem@comcast.net.

Your name _____

Your email _____

Wednesday, December 4

Lower Extremity Exam Course, Moschetti, Theodore

1. Limitation in flexion and internal rotation of the hip is common with hip osteoarthritis? TRUE or FALSE
2. The following physical exam test is commonly positive for someone with an ACL injury:
 - a. Flexion and external rotation test (Dial test)
 - b. Anterior drawer (Lachman test)
 - c. Circumduction test (McMurray test)
 - d. Posterior drawer test
 - e. Patellar grind test
3. A meniscal tear of the knee is commonly identified through which of the following clinical findings:
 - a. Anterior knee pain with stairs
 - b. Pain with palpation of the medial joint line
 - c. Pain with palpation of the tibial tubercle
 - d. Pain with palpation over the inferior pole of the patellar
4. A 65-year-old male propane delivery driver has progressively worsening low back and buttocks pain that radiates to the right groin and knee. Which of the following physical exam findings is concerning for hip pathology?
 - a. Pain with resisted hip abduction
 - b. Tenderness to palpation of the greater trochanter
 - c. Pain that resolves with flexion and rest
 - d. Positive straight leg raise
 - e. Pain that is reproduced with flexion and internal rotation of the hip
5. A 65-year-old male propane delivery driver has progressively worsening low back and buttocks pain that radiates to the right groin and knee. Which of the following physical exam finding is concerning for lumbar spine pathology?
 - a. Pain with resisted hip abduction
 - b. Tenderness to palpation of the greater trochanter
 - c. Pain that resolves with flexion and rest
 - d. Positive straight leg raise
 - e. Pain that is reproduced with flexion and internal rotation of the hip
6. An 80-year-old man has ruptured his anterior tibial tendon. This injury may result in all of the physical exam findings except:
 - a. Slap gait pattern
 - b. Anterior ankle soft tissue prominence
 - c. Weakness of resisted ankle dorsiflexion
 - d. Positive Thompson's test
 - e. Palpable dorsalis pedis pulse
7. Plantar fasciitis is usually associated with which of the following physical examination findings?
 - a. Numbness along the dorsum of the foot
 - b. Tenderness along the medial calcaneal tuberosity
 - c. Tenderness along the course of the Achilles tendon
 - d. Positive McMurray's test
 - e. Absence of dorsalis pedis pulse
8. A 50-year-old male experienced sudden pain and pop along the back of his ankle while playing tennis. What is the key physical examination finding to diagnose his problem?
 - a. Positive Lachman test
 - b. Positive anterior drawer test
 - c. Positive Mulder's click
 - d. Positive Thompson's test
 - e. Positive straight leg raise test

9. A 45-year-old female has torn her posterior tibial tendon. What physical examination finding would not be consistent with this diagnosis?
- Tenderness along the course of the medial aspect of the ankle
 - Weakness of resisted foot inversion
 - Collapse of the arch with weightbearing
 - Inability to single heel rise
 - Numbness at the tips of her toes

Thursday, December 5

Work Related Concussion, Sumner

True or False

10. An ocular finding consistent with concussion is inability to maintain concordant vision?
11. A Balke test is useful to monitoring recovery from the physiological effects of concussion?
12. Neuroendocrine labs should be ordered at 3 months post injury if signs of anterior pituitary gland injury are present?

Concussion: A Focus on Vision, Scheiman

13. Which of the following conditions is prevalent after concussion?
 - Reduced visual acuity
 - Cataract
 - Accommodative insufficiency
 - Macular degeneration
14. There are randomized clinical trials demonstrating the effectiveness of vision rehabilitation for convergence and accommodative problems. True or False
15. The near point of convergence test is used to screen for:
 - Saccadic dysfunction
 - Convergence insufficiency
 - Myopia
 - Depth perception

Treatment for At-Risk Patients, Christian

16. Which statement is true?
 - A small fraction -- 5 to 10% of all patients -- end up with unexpectedly poor outcomes.
 - That same 5 to 10% of cases consumes between 65% and 80% of all resource dollars.
 - Roughly half of the people going onto SSDI have had unexpectedly poor outcomes of common health conditions – especially back and other musculoskeletal pain, anxiety and depression.
 - a and b.
 - All of the above.
17. Which statement is incorrect? Patients with medically unexplained physical symptoms:
 - Represent a tiny fraction of patient volume – rarely seen but memorable.
 - Represent more than 25% of patient visits to primary care physicians and specialists for certain very common presenting complaints.
18. True or false: Words are a powerful and effective treatment modality.
19. Which is the correct statement?
 - Patients' answers to interview questions, as well as their responses on formal testing instruments can reveal problematic attitudes, beliefs, and expectations that predict delayed recovery/ poor outcomes.
 - Fear avoidance, catastrophic thinking, and perceived injustice are all known contributing factors to delayed recovery/poor outcomes.
 - Physicians, psychologists and others whom patients perceive as credible can influence patient attitudes, beliefs, and expectations – in positive and in negative directions -- and in so doing, affect outcomes.
 - a and c
 - All of the above.

My Eclectic Journey in OM, Winters

20. In developing one's own practice of occupational medicine, focusing solely on one specific client type or industry is recommended. True or False
21. Strategies for social change include changing other's attitudes, values, beliefs and behaviors True or False

22. Advocacy for the field of occupational health and quality of care of the individual worker can be accomplished by:
- Training and education
 - Harnessing technology and utilizing social media
 - Influencing organizational leadership and political decisionmakers
 - All of the above

The Effect of Obesity on Worker Compensation, Erdil

23. Which of the following statements are true regarding the association of obesity and work?
- Workplace absenteeism and missed workdays are higher in obese vs. normal weight employees.
 - Work limitations are present more frequently in employees who are obese vs. normal weight.
 - Obese employees have more lost workdays under sickness and short-term disability vs. normal weight employees.
 - All of the above.
24. True or false: Obesity has been identified as causing or contributing to causation of several musculoskeletal conditions including hip and knee osteoarthritis and carpal tunnel syndrome.
25. Which of the following statements are true regarding the effects of obesity on orthopedic surgery?
- The risk of perioperative cardiovascular and thromboembolic complications is similar in obese vs. normal weight patients.
 - The rate of post-operative complications of joint replacement including seromas and wound infections is increased in obese vs. normal weight patients.
 - Outcomes are similar for joint replacement, spinal surgery and knee arthroscopy.
 - None of the above.

PFAS in Water, Malley

26. PFAS chemicals were created and used for which of the following commercial purposes?
- To control petroleum related fires for the military, airports and refineries.
 - As a coating on papers used in the fast food industry.
 - As a coating for clothing and furniture to resist stains.
 - All of the Above.
 - None of the Above.
27. PFAS has been characterized as an EPA Class A Carcinogen?
- True
 - False
28. The most commonly used treatment for PFAS in drinking water at present is?
- Biological Treatment.
 - Air Stripping with Ozone.
 - Granular Activated Carbon Adsorption.
 - All of the Above.
 - None of the Above.

Cervical Spine, Bassi

29. A 25 year old injured worker who has been evaluated in the occupational medicine clinic for neck pain after falling on an icy floor in the hospital parking lot was seen for follow up after 8 weeks. She continues to complain of burning and sharp pain in her right periscapular region, despite a trial of PT and muscle relaxants. Additionally, she reports progressive difficulty with gait and balance, and her exam is remarkable for brisk lower extremity reflexes. Remainder of exam is intact including sensation to light touch and pinprick and strength in upper and lower extremities. What is the next most appropriate step?
- reassure the patient and return her to work
 - Trial of a cervical collar
 - MRI cervical spine
 - oral prednisone taper
30. A 45-year-old injured worker who complained of neck pain, numbness and tingling around the right neck and shoulder region. Cervical spine flexion and extension X-ray had shown normal alignment with decrease disc height at C2-C3 and C5- C6. Nerve conduction and Electro diagnostic evaluation of the bilateral upper extremity a week ago is normal. Despite one month of physical therapy the patient continues to complain of worsening pain that radiates to the right side of the head and neck region. What is the most appropriate next step?
- send him back to work as she has had adequate therapy and is malingering

- b. Repeat EMG as the pain is now worsening
- c. order MRI of the cervical spine to rule out nerve root compression
- d. Place him on hydromorphone as non-opioid pain medications tend not to work for radiculopathy pain

31. An injured worker with neck pain with radicular symptoms shoulder never be recommended return to work in any capacity unless the radicular symptoms resolve (T/ F)

Marijuana in the Workplace

32. Employers are always required to accommodate requests to use medical marijuana at work. True or False
33. All of the following are true about cannabidiol (CBD) except:
- a. Most CBD products are not regulated by the Food and Drug Administration
 - b. CBD is not the principal psychoactive ingredient in marijuana
 - c. CBD products may contain THC, which may yield a positive drug test for marijuana metabolites
 - d. CBD is chemically indistinguishable from tetrahydrocannabinol (THC)
34. The level of THC in blood can be used to determine impairment. True or False

Friday, December 6

Occupational Dermatology, Watsky

35. What is the most common clinical presentation of occupational skin disease:
- a. Latex allergy
 - b. Nummular dermatitis
 - c. Irritant contact dermatitis
 - d. Allergic contact dermatitis
 - e. Impetigo
36. Which of these is the most significant patient risk factor for developing occupational skin disease:
- a. A history of psoriasis
 - b. Smoking
 - c. Working multiple jobs
 - d. A history of atopic dermatitis
 - e. Not using proper gloves
37. Which of these pairs of allergens would be most relevant for a hairdresser:
- a. Paraphenylenediamine and glyceryl monothioglycolate
 - b. Nickel and thiourea
 - c. Methylmethacrylate and propylene glycol
 - d. Benzoyl peroxide and potassium dichromate
 - e. Hydroxyethyl methacrylate and formaldehyde

It Takes a Herd: The High Cost of Vaccine Hesitancy, Madoff

True or False

- 38. Birth prior to 1957 is sufficient evidence of immunity to measles for a healthcare worker.
- 39. The rate of medical exemptions to vaccination has remained constant over many years.
- 40. Strong provider recommendation is the single most important measure to promote vaccination.

The Knee: Diagnosis and Treatment, Van Flandern

41. What type of injuries to the knee occur in the workplace?
- a. Sprains/strains
 - b. Meniscal tears
 - c. ACL/PCL/MCL tears
 - d. Bursitis, Tendonitis
 - e. Fractures
 - f. all of the above
42. How is the knee best evaluated?
- a. Comprehensive history
 - b. Physical exam
 - c. Plain x-rays
 - d. MRI

- e. All of the above

43. What are the best care options for knee injuries?

- a. Conservative care (physical therapy, NSAID's)
- b. Steroid injections
- c. Surgery – arthroscopy
- d. Reconstruction
- e. Trauma fixation
- f. All of the above

Improving yoUR Outcomes, Erdil

44. True or false: UR nurses may approve requests for treatment but are not permitted to deny care requests.

45. Which of the following statements are true regarding the qualifications required for a UR appeal reviewer?

- a. Must be in the same profession and similar specialty.
- b. Must be board certified (if applicable i.e. request from an MD or DO).
- c. Must not be the reviewer who recommended the UR denial, nor a subordinate of the person who denied the UR request.
- d. All of the above.

46. True or false: UR denials must cite the specific medical reasons for the denial and criteria that were not met according to the applicable guideline (treatment or UR).

Bloodborne Pathogens and TB Updates, Winters, Barbeau

47. Which of the following statements best summarizes CDC's recommendations for preventing transmission of *M. tuberculosis* in health-care settings?

- a) Every health-care setting should have a tuberculosis infection-control plan and should conduct periodic assessments of *M. tuberculosis* transmission risk in order to determine the types of controls needed for that setting.
- b) Healthcare workers with latent tuberculosis infection need to be excluded from caring for patients in a protective environment, such as bone marrow transplant units.
- c) Tuberculin skin testing is superior to Interferon-Gamma Release Assays for the diagnosis of tuberculosis infections, especially in persons who received BCG (bacille Calmette-Guérin) vaccination.
- d) Screening healthcare workers for latent tuberculosis infection is the most important tool in reducing the spread of tuberculosis in health-care settings.

48. A 32-year old nurse sustains a needlestick injury involving blood from an unknown source. She discloses that she recently learned she is pregnant (first trimester). Which of the following regimens should be *avoided* in this patient?

- a) Zidovudine/lamivudine + Atazanavir + ritonavir
- b) Tenofovir /emtricitabine + raltegravir
- c) Tenofovir /emtricitabine + dolutegravir
- d) Zidovudine/lamivudine + darunavir + ritonavir

Imaging the Lower Extremity, Schwartz

True or False -

49. In an adult patient with chronic knee pain, the most appropriate initial imaging test is an MRI.

50. In an adult patient with acute knee trauma, negative x-rays and suspected internal derangement, the next imaging test to obtain is an MRI.

DOT/NRCME Update, Blum, Poliner, Lundquist

True or False

51: Regulatory requirements for acceptable blood pressure measurements can be found on the reverse of the current FMCSA Medical Examination Report form.

52: A Medical Examiner cannot qualify a commercial driver for less than one year after a prior qualification period of three months.

53: The legalization of the use and possession of marijuana by a state does not change the treatment of marijuana use under federal regulations applicable to commercial motor vehicle drivers operating a vehicle in interstate commerce.

OH Hazards in High-Performance Flight Environment, Schiebler

54. Common maneuvers performed by fighter pilots that are high-risk, worsened with the addition of g-forces and often result in acute neck injuries include all of the following EXCEPT:

- a. Neck flexion to look down into the cockpit
- b. Neck extension, lateral bending and axial rotation to look behind the aircraft
- c. Axial rotation to scan airspace in front of the aircraft
- d. Neck extension to look directly above the aircraft

55. The main occupational injury discussed at the end of the presentation focused on a case with diagnosis of lateral epicondylitis. In this specific case, causes of the work-related musculoskeletal injury included:

- a. Force
- b. Repetition
- c. Awkward Posture
- d. All of the above

Sleep and Transportation Safety, Parenteau

56. What percentage of US drivers admit to falling asleep or nodding off while driving at some point during their lifetime?

- a. 25%
- b. 33%
- c. 50%
- d. 66%
- e. 75%

57. What legal theory can hold employers liable for their fatigued workers' actions that cause injury to a third party's person or property?

- a. *Respondeat superior*
- b. *Res ipsa loquitur*
- c. Strict liability
- d. Workers' compensation
- e. Circadian misrepresentation

58. Employers can mitigate fatigue-related liability by all of the following EXCEPT

- a. Using independent contractors instead of employees
- b. Implementing policies and procedures to identify sleep disorders
- c. Following the federal requirement to objectively screen for sleep disorders
- d. Educating workers about fatigue, sleep, and circadian rhythms
- e. Enacting non-punitive programs that allow workers to decline work assignments when fatigued

Violence among Emergency Dept Employees, Khatlani

59. The prevalence of workplace violence injuries is observed to be particularly higher in the following departments of a hospital:

(Mark all that are applicable)

- f. Geriatric unit
- g. Emergency Department (ED)
- h. Pediatric ED
- i. Obstetrics and Gynecology unit
- j. Primary care physicians' office
- k. Psychiatric unit

60. The estimated prevalence of workplace violence injuries among security personnel is higher as compared to other employees in the Emergency Department (ED). This is:

(Mark all that are applicable)

- a. True positive
- b. Likely a result of over-reporting among security personnel
- c. Due to nature of the job of security personnel
- d. True positive as security personnel do not under-report

Answers, MOC, December 4-5-6, 2019

1. True
2. b. Anterior drawer (Lachman test)
3. g. Pain with palpation of the medial joint line
4. e. Pain that is reproduced with flexion and internal rotation of the hip
5. d. Positive straight leg raise
6. d. Positive Thompson's test
7. b. Tenderness along the medial calcaneal tuberosity
8. d. Positive Thompson's test
9. e. Numbness at the tips of her toes
10. True
11. True
12. True
13. C. Accommodative insufficiency
14. True
15. b. Convergence insufficiency
16. e. All of the above.
17. b. Represent more than 25% of patient visits to primary care physicians and specialists for certain very common presenting complaints.
18. True
19. e. All of the above
20. False
21. True
22. d. all of the above
23. d. All of the above.
24. True
25. b.
26. d. All of the Above.
27. b. False
28. c. Granular Activated Carbon Adsorption
29. C. MRI of cervical spine
30. C.
31. False
32. False – Although an interactive process is required, accommodations are not necessarily automatically offered, particularly if it is an undue burden to the employer. Furthermore, accommodations for safety sensitive positions may require further scrutiny and is not required for federal employment.
33. d. CBD is chemically distinguishable from THC and is not the primary psychoactive component of marijuana (*Cannabis*).
34. False
35. C. Irritant contact dermatitis
36. d. A history of atopic dermatitis
37. a. Paraphenylenediamine and glyceryl monoethioglycolate
38. False
39. True
40. True
41. f. all of the above
42. e. all of the above
43. f. all of the above
44. True. UR nurses must refer treatment requests that do not meet applicable guidelines to an appropriate clinical peer (i.e. physician, chiropractor, psychologist, physical or occupational therapist, etc.) before a denial (adverse determination) is rendered.
45. d. All of the above are required for an appeal UR reviewer.
46. True. UR denials must specify why guideline criteria were not fulfilled.
47. a.
48. c.
49. False
50. True
51. FALSE: This information is no longer printed on the reverse side of the form. Medical Examiners can refer to 49 CFR 391.432(f) and 49 CFR 391.41(b)(6) for recommendations concerning qualification criteria and duration related to hypertension
52. FALSE - The Medical Examiner can qualify a driver for whatever period (two years or less) the examiner believes to be appropriate.
53. TRUE – Marijuana, including a mixture or preparation containing marijuana, continues to be classified as a Schedule I controlled substance by the DEA. FMCSRs state that a person is not qualified to drive a CMV if using, being in the possession of, or under the influence of any Schedule I controlled substance while on duty.
54. c.
55. d.
56. c.
57. a.
58. c. Many businesses attempt to protect themselves from liability by hiring independent contractors, rather than employees. However, businesses risk losing this liability protection as they exert more control over a driver by directing the number of hours driven, routes taken, and when rest breaks are authorized. At a certain point, courts will find that although the contractual relationship was characterized as an independent contract the actual behaviors of the business and driver transformed it into an employer-employee relationship regardless of what was written on paper
59. a, b, c and f are correct
60. a, b and c are correct