TEST BANK

Subject:

MLC-Makeup 019

Collected by

One of the following statements is NOT TRUE with regard to skeletal muscle contractile mechanisms:

a. Generation of motor endplate potentials is depending on the activity of chemical gated Na+ channels.

b. Transmission of action potential at neuromuscular junction can be reduced by blocking nicotinic receptors at the motor endplate.

c. Phosphorylation of myosin heads is required for interaction of thin and thick filaments.

d. Creatine phosphate is required for activation of troponin C.

e. Higher amplitude of contraction can result by motor unit summation.

Which of the following is TRUE?

a. Cellulitis alone is usually not part of diabetic foot presentation as there is no ulceration

b. When necrosis sets in diabetic foot, obligate anaerobes are unlikely to be present

c. Diabetic foot either can have any of musculoskeletal system infections (cellulitis or fasciitis or osteomyelitis) but usually not together

d. Peripheral neuropathy causes overflow of blood sugar to the limbs in diabetic foot infection which increases likelihood of infection

e. First presented, none infected diabetic foot ulcers are antibiotic naïve

A 50-year-old woman presents with bilateral hands joint pain with morning stiffness. The pain decreases after couple of hours of daily activities. The small joints of the hand are swollen, tender and warm. Ulnar deviation and swan-neck deformity are noted on examination. Which one of the following statements best describes this disease?

a. Reactive degenerative arthritis

b. Most cases are mild and are relieved by NSAIDs

c. An associated sacroiliitis is usually present in 95% of the cases

d. Positive rheumatoid factor in around 75% of cases

e. Diagnosis needs CT scan imaging confirmation

Which of the following is correct treatment for gas gangrene?

a. Vancomycin

b. Clindamycin + Penicillin

c. Oxacillin

d. Amoxicillin

e. Ampicillin/Sulbactam

Colchicine

a. Causes cellular proliferation

b. Enhances uric acid excretion

c. Is an effective analgesic in osteoarthritis

d. Is used for treatment and prevention of acute gouty arthritis

e. All of the mentioned

At the peak of simple muscle twitch of a skeletal muscle:

a. The A band is shorter than in the latent period.

b. Sarcolemma is in depolarization.

c. Na+ channels are transforming into a state of closed and not capable for opening.

d. Ca++ diffusion from the extracellular space is higher than at any other period.

e. Interaction between thick and thin filaments is the highest.

Which of the following is FALSE?

a. Reduced blood flow to the lower limb seen in diabetes or peripheral vascular disease promote type 1 necrotizing fasciitis

b. Group A strep cause a more fatal type of necrotizing fasciitis

c. An alcoholic patient is more likely to have necrotizing skin infections

d. Majority of necrotizing fasciitis occur in extremities and perineum

e. Fournier's gangrene is more likely to be polymicrobial

Ear anatomy, choose the WRONG statement

a. Both muscles of the middle ear dampen down vibrations of tympanic membrane

b. The pharyngotympanic tube is at the anterior wall of the middle ear

c. Internal jugular vein is closely related to the floor of the middle ear

d. The sensory innervation of the lower half of the auricle is derived from great auricular nerve

e. The tympanic membrane is at the lateral wall of the middle ear and is concave laterally

A 33-year-old man with axial back pain and bilateral leg pain due to isthmic spondylolisthesis. Which of the following is the cause of this type of spondylolisthesis?

a. Traumatic fracture with intact pars interarticularis

b. Pathologic local bone disease

c. Degenerative instability with intact pars interarticularis

d. L5 arch congenital abnormality

e. Fatigue fracture of the pars interarticularis

During a routine auditory test, a child is found have a severe conduction deficit in one ear. High resolution CT scan of the tympanic cavity shows a complete agenesis of the stapes. This condition could result from failure of formation of the stapes from which of the following structures?

a. First branchial arch

b. First branchial pouch

c. Second branchial arch

d. Third branchial arch

e. Frontonasal process

A 45-year-old male patient came with chronic backache, weight loss and loss of appetite. Physical examination showed localized tenderness over the thoracic vertebrae 17-8. Bone MRI showed lytic none lesions on those 2 vertebral bodies. FINE needle aspiration was performed and showed necrotizing granulomas. What is the most likely diagnosis?

a. Avascular necrosis

b. Potts disease

c. Metastatic malignancy

d. Rheumatoid arthritis

e. Sarcoidosis

What is the cutaneous branch of the cervical plexus that crosses over the sternocleidomastoid muscle?

a. Great auricular

b. Supraclavicular

c. Phrenic

d. Transverse cervical

e. Lesser occipital

A young boy is brought to a physician working in a field hospital. The mother of the boy says he has difficulty swallowing and that food is expelled through the nasal cavity. Upon examination, the physician finds a large defect in the hard and soft palates and suspects that the child developed with a cleft of the secondary palate. Which of the following is the anatomical landmark that would be used to differentiate Primary and Secondary cleft palate?

a. Mental foramen

b. Incisive foramen

c. Greater palatine foramen

d. Mandibular foramen

e. Infraorbital foramen

A patient has a fracture in the middle cranial fossa. You suspect damage to the nerve passing through foramen ovale. You would test the sensory function of this nerve by:

a. Asking the patient to speak loudly

b. Asking the patient to open his jaw when resistance is applied

c. Touching the face with a cotton swab and ask the patient whether he felt it

d. Asking the patient to rotate his head to one side against resistance

e. Asking the patient to close his eyes tightly

Muscles of the neck, choose the CORRECT statement:

a. Moving the head so that the face looks upwards and to the left is a movement produced by the left sternocleidomastoid

b. All infrahyoid muscles are supplied by ansa cervicalis

c. Two suprahyoid muscles are supplied by a branch from mandibular nerve

d. Bilateral contraction of scalene anterior muscles results in lateral flexion of cervical spine

e. Sternothyroid is the most superficial of infrahyoid muscles

Multiple osteoblastic bone lesions were discovered in a 75-year old male patient. The top differential diagnosis should include?

a. Polyostotic fibrous dysplasia

b. Metastatic sarcoma of unknown primary

c. Ollier disease or Maffucci syndrome

d. Multifocal giant cell tumor of bone

e. Metastatic carcinoma, probably prostate primary

Which one of the following drugs is least likely to be effective in the treatment of esophageal candidiasis, it is used by the oral route?

a. Fluconazole

b. Ketoconazole

c. Amphotericin B

d. Clotrimazole

e. Griseofulvin

You are evaluating a 65-year-old female patient who came with right hip joint pain. Rheumatoid factor is negative. No other joints are affected and the patient

recalled recent eye disease requiring frequent ophthalmological evaluation. No skin manifestation or urinary abnormalities noted. Bone MRI revealed right sacroiliac joint fusion. Serum HLA typing was positive for HLA B-27. What is your best diagnosis?

a. Sero-negative rheumatoid arthritis

b. Ankylosing spondylitis

c. Psoriatic arthritis

d. Mono-ostotic osteoarthritis

e. Reiter syndrome

You are an intern in the emergency room on Thursday night. A 59 year-old male came with painful and swollen right big toe. No history of trauma or similar attacks in the past. No fever and his white blood cell count is within normal range. What would be your best action?

a. Consider acute gout, aspirate the joint to check for crystals

b. Consider unnoticed trauma and linear fracture, order X-rays

c. Consider rheumatoid arthritis, and order rheumatoid factor test

d. Consider acute septic arthritis; plan admission and consult pediatrics and orthopedics on call

e. Treat as a case of severe osteoarthritis

Which of the following is FALSE?

a. Primary therapy for surgical site infection is more surgical than medical (antibiotics)

b. Fever in surgical site infection may not be present in the beginning

c. Deep incisional surgical site infection can occur after 1 year of operation if prosthesis is involved

d. Gastric and genitourinary organ surgeries are associated with higher rate of infection

e. Number of bacteria needed to cause an infection is increased if prosthesis is involved

Which of the following pairs of events are related to each other in skeletal muscle contractile mechanisms:

a. Rigor mortis and Decreased c-AMP in sarcoplasm.

b. Fast muscles and Oxidative phosphorylation.

c. Phosphorylation of troponin C and Shortening in muscle.

d. ATP and Detachment of myosin heads.

e. Blocking of cholinesterase and Decreased Ach concentration in cleft.

Which of the following combination for osteomyelitis organisms and pathogenesis is FALSE?

a. S. aureus: most common, most aggressive

b. Gram negative enterics: de novo resistance development

c. Pseudomonas: biofilm production, antimicrobial resistance

d. Anaerobes: usually monobacterial, depends on devitalized tissue

e. Coagulase negative staph: biofilm production, prosthetics

Which if the following is TRUE?

a. Pediatric osteomyelitis is usually chronic and due to hematogenous spread

b. Blood cultures are negative usually in vertebral osteomyelitis

c. ESR and CRP are usually not elevated in osteomyelitis

d. Circulation overlap with the urinary tract helps E. coli vertebral osteomyelitis

e. Dormant forms of microbes improve efficacy of treatment

A 65-year-old female patient came with chronic progressive bilateral knee and ankle joint pain. While evaluating her knee X rays, you noticed narrowing of joint spaces, eburnation of articula cartilage, subchondral cystic formation and occasional osteophytes in the joint cavity. What is the most likely diagnosis?

a. Reiter syndrome

b. Seropositive rheumatoid arthritis

c. Ankylosing spondylitis with fusion of joints

d. Seronegative sacroiliitis and ulnar deviation

e. Advanced degree of osteoarthritis/ degenerative joint disease.

The lateral pterygoid muscle

a. is attached to the neck of the mandible and retracts the mandible

b. is attached to the neck of the mandible and protrudes the mandible

c. is attached to the coronoid process and protrudes the mandible

d. none of the mentioned

e. is attached to the coronoid process and retracts the mandible

Scalp, choose the CORRECT statement:

a. The large blood vessels of the scalp run in the subaponeurotic loose areolar tissue

b. Its veins communicate directly with the cavernous sinus

c. It has no sebaceous glands

d. Bleeding beneath the pericranium of the scalp reaches to the upper eyelids

e. It contains a muscle of facial expression

You received a large soft tissue mass from the retroperitoneum for a 71-year-old male patient. The mass measures 20x18x15 cam with ill-defined borders. Sectioning through the mass showed hemorrhage and necrosis. Which one of the following features would be most likely?

a. Bland smooth muscles proliferation with low mitotic count

b. Anaplastic cells with increased mitosis

c. Benign neoplasm but with frequent local recurrence

d. Low grade malignancy with good prognosis

e. The presence of central cyst formation

Choose the azole antifungal drug which is used only topically

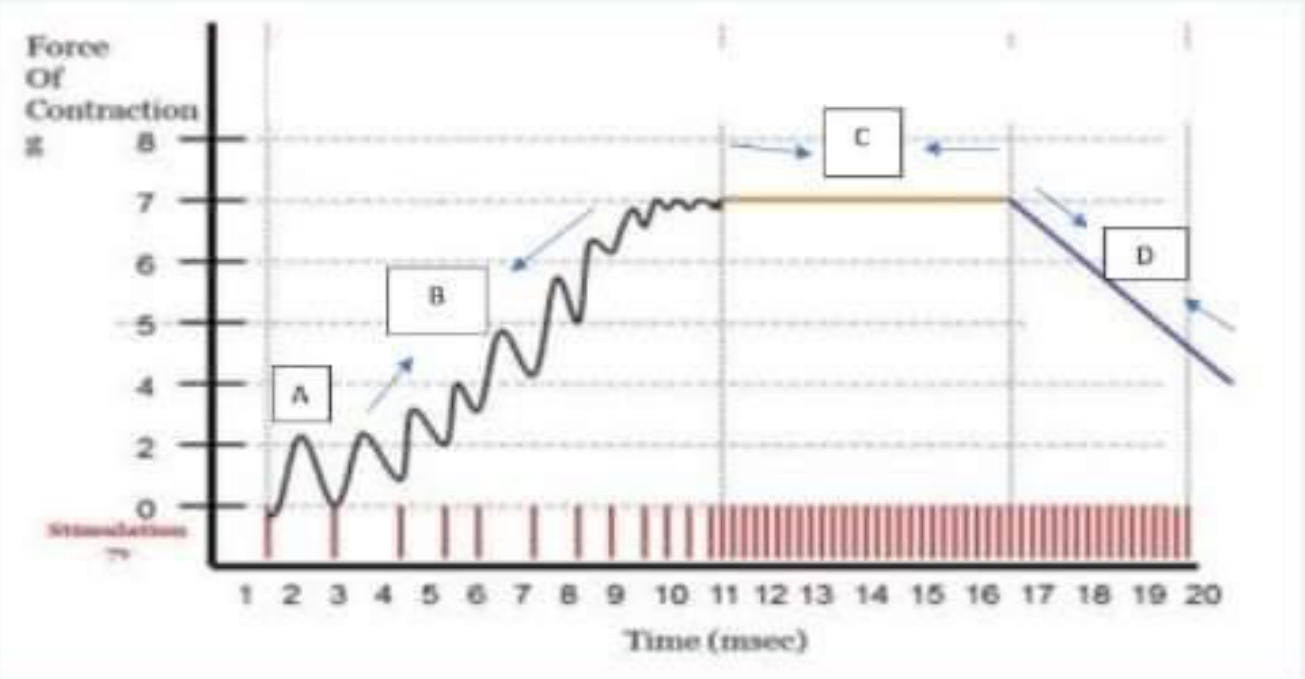
a. Econazole

b. Fluconazole

c. Ketoconazole

d. Itraconazole

Practical: Regarding the figure below which of the following sentences is CORRECT?



- a. Area B represents treppe phenomenon
- b. Area C represents the maximum tension the muscle can achieve
- c. The muscle in Area A has higher calcium concentration in the sarcoplasm than in Area B
- d. Area B happens because of decreased rate of stimulation
- e. Area D happens because of increased transmission at the neuromuscular junction