

Savali



UNIVERSITY OF NAIROBI
DEPARTMENT OF ORTHOPAEDIC SURGERY
END OF ROTATION YEAR 6 MCQ C.A.T

PRAB SEHMI
5B ANSWERS

LEVEL 6 GROUP C1 - C8

DATE: MONDAY JULY 23, 2018

M.C.Q

TIME: 8.00 A.M TO 12 NOOM

REGISTRATION NO: _____

INSTRUCTIONS: ANSWER ALL QUESTIONS. ONLY ONE ANSWER IS CORRECT

1. Lachman's test is positive in:-

- a) Anterior cruciate ligament injury ✓
- b) Posterior cruciate ligament
- A c) Posteromedial ligament
- d) Lateral meniscus
- e) Medial meniscus

2. Non-union is common in the fracture of the:-

- a) Lower tibia ✓
- b) Ulna
- A c) supracondylar humerus
- d) Coracoid process
- e) Clavicle

Non-union

distal 1/3 tibia	- Intra	Malunion	- Intra
ulna distal 1/3	- supra		
Femur neck	- supra		
lateral condyle humerus	- supra		
Body tibia	- supra		
Scaphoid	- supra		

Femur neck

AVW

- ~~neck~~ head
- Scaphoid (Cervix)
- body tibia

L
U
T
T
S

3. Sunburst appearance is found in:-

- a) Osteosarcoma ✓
- b) Ewing's sarcoma
- A c) Osteoclastoma
- d) Osteoid osteoma
- e) Chondrosarcoma

4. Metastasis from which organ is ideal for hormone therapy with stilboestrol.

- a) Breast
- B b) Prostate ✓
- c) Thyroid
- B d) Adrenal gland
- e) Neuroblastoma

lytic lesion
1. Simple bone cyst
2. Brodie's abscess
3. Osteoblastoma
4. Chondroblastoma

long lesion in bone - 2 yrs.

5. Which is NOT true of Osteoclasts:-
a) Derived from monocytes ✓
b) Activity influenced by PTH ✓
c) Involved in resorption. ✓
d) Play a role in phagocytosis. ✓
e) Bisphosphonates promote apoptosis. ✓

D

6. The most confirmatory test for myeloma is:-
a) Aspiration of the lesion.
b) Bence Jones protein
c) Serum electrophoresis ✓
d) Technetium - 99 radionuclide bone scan
e) Bone immunohistochemistry

C

7. The Enzyme deficiency in ochronosis is: -alkaptonuria
a) Xanthine oxidase
b) Homogentisic acid oxidase ✓
c) Alkaline phosphatase.
d) Collagenase
e) None of the above.

B

8. The operation to improve movement in Sprengel's deformity is best done at:-
a) Neonatal period
b) Infancy
c) Above 6 years ✓
d) Adolescence ✓
e) Adult age ✓

C

< 6 years

Scapulo

3-5 yrs

9. Erosion of a joint is seen in all the following except:-
a) Psoriasis
b) Gout
c) Systemic Lupus erythematosus ✓
d) Rheumatoid arthritis
e) Degenerative osteoarthritis (Primary)

C

10. The calcification in CPPD crystal deposition is usually:- Pseudogout
a) Bilateral and symmetrical ✓
b) Bilateral and asymmetrical
c) Unilateral and regular
d) Irregular and Unilateral
e) Cloudy and irregular

A

11. True about sub acute haemotogenous osteomyelitis:-

C

- a) Temperature usually rises X
b) WBC count rise X (not rightly)
c) ESR usually high ✓
d) Common in middle aged males X (2-25 yrs)
e) Septicemia is common. X

Mild osteome pain
- Med. localized bone pain
- Mild to systemic manifestations
- Non-contributory lab results
- Negative blood cultures
- Positive radiological findings

Blood culture negative
ESR CRP mildly elevated

Ans. is D. is generally incomplete
5. In children best remodelling is seen in fracture with (AIIMS Feb 1997)
A. Angulation in diaphysis B. Angulation in metaphysis
C. Rotation in diaphysis D. Rotation in metaphysis

ii. Perthes disease (in repair stage)
iii. Hemophilic arthropathy (in hemiplegia)

12. The "so called" race for the surface is said to exist between:-
 a) Bacteria and virus
 b) Bacteria and fungus
 c) Bacteria and human cells ✓ *Crestina 1987*
 d) Microbes and receptors on the surface of implants ✓
 e) Drugs administered and microbes.

13. In general the joint motion is described in:-
 a) 2 degrees of freedom
 b) 3 degrees of freedom
 c) 4 degrees of freedom
 d) 6 degrees of freedom ✓
 e) 9 degrees of freedom.

14. Marjolin's ulcer is:-
 a) Chronic non healing ulcer seen in diabetic.
 b) Venous ulcer
 c) Chronic ulcer seen in immune compromised
 d) Seen in un treated chronic osteomyelitis ✓ *burn*
 e) Dermatomyositis

15. The gold standard for the diagnosis for the pulmonary embolism is:-
 a) CXR
 b) CT- Scan
 c) Spiral CT
 d) V/Q scan
 e) Pulmonary angiography ✓

16. The synovial fluid is produced mainly by:-
 a) Type A synovial cells
 b) Type B synovial cells ✓ *A...phagocytosis*
 c) Type C synovial cells
 d) Transudate from capillary network
 e) Underlying chondrocytes.

17. A marker of bone resorption is:-
 a) Serum alkaline phosphatase X
 b) Serum acid phosphatase ✓ *TRAP₅ Urinary hydroxyproline*
 c) Urinary hydroxyproline
 d) Urinary calcium
 e) Reduced PTH level.

18. No man's land is an area of the :-
 a) Proximal palm
 b) Distal palm and proximal phalange ✓
 c) Wrist
 d) Forearm
 e) Distal Phalange

From from to
 1. BAP
 2. Osteocalcin (OC)
 Bone resorption
 1. Parathyroid hormone
 2. Parathyroid related protein (PTHrP)
 3. Calcitonin
 4. Calcitonin receptor related protein (CTRPR)

Distal
 - Area of hand where FDS & FDP change their position relative to one another while passing thru a synovial sheath with minimum to lateral approx. from the distal palmar crease to the midpoint of the middle phalange

19. The movements flexion and extension are said to occur :-
a) in the Sagittal plane
b) in the Coronal plane
c) Away from midline
d) In the Axial plain
e) Towards the midline
20. Periosteal new bone formation is a characteristic feature of :-
a) Infection ✓
b) Scurvy ✓
c) Fracture ✓✓
d) Malignancy ✓
e) All the above. ✓
21. Romberg's sign is positive in :- *balance*
a) Injury to anterior horn cells
b) Posterior column Injuries ✓
c) Posterior spinal cord syndrome ✓
d) Anterior spinal cord syndrome
e) Central cord injury.
22. The intensity of MRI signal depends upon the :-
a) Water content of living tissues ✓
b) Density of hydrogen nucleus
c) Oxygen concentration
d) Carbon element
e) All of above.
23. The most accessible joint for arthroscopy is the :-
a) Shoulder
b) Knee ✓
c) Ankle
d) Hip
e) Elbow.
24. The most common type of shock occurring after a traumatic injury is :-
a) Spinal shock
b) Septic Shock
c) Cardiogenic shock
d) Hemorrhagic shock ✓
e) Anaphylactic shock.
25. The adequate urinary output in an adult is :-
a) 0.5 ml/kg/hr
b) 1.0ml/kg/hr ✓ *0.5-1.0 ml/kg/hr*
c) 2.5 ml/kg/hr
d) 2.0 ml/kg/hr
e) 9.0 ml/kg/hr

D. All of the above
Ans. is 'B' Is generally incomplete
5. In children best remodelling is seen in fracture with:
(AIIMS Feb 1997)
A. Angulation in diaphysis B. Angulation in metaphysis

- a. Solitary
i. Post inflammatory (IRA, Septic arthritis)
ii. Perthes disease (in repair stage)
iii. Hemophilia (Hemophilic arthropathy)

33. Triad of Klippel - Feil syndrome includes all except:-
 a) Short neck ✓
 b) Low posterior hairline ✓
 c) Restriction of neck movement ✓
 d) Cervical meningocele ✓
 e) None of the above.
Klippel-Feil syndrome
 ✓ Congenital fusion of one or more cervical vertebrae
 ✓ Character Triad:
 1. Low hair-line
 2. Short, web-neck
 3. Limited neck motion
 ↳ as to appearance of Triceps m.
34. All are True statements about supracondylar fracture of humerus except:-
 a) Ulnar nerve is the most commonly injured. ✓
 b) Extension type is the commonest ✓
 c) Malunion leads to cubitus varus deformity. ✓
 d) Uncommon in children above 15 years of age. ✓
 e) Posterior lateral instability in cubitus varus elbow develops. ✓
AIIP → Median → Radial → Ulnar
deformity
 ✓ Congenital high scapula
 ✓ Permanent abn of shoulder girdle
35. Suspected medial epicondylar fracture of humerus in a 4 year old child requires:-
 a) X-ray both arms with elbow for comparison. ✓
 b) X-ray same hand only ✓
 c) Examination under anaesthesia X
 d) PoP in full extension. X
 e) None of the above.
Medial epicondylar fr
 ✓ 9-14 yrs
 ✓ Seen in children
 ✓ Rx - usually non-operative
 ✓ long non-ant, elbow flexed 90°
 ✓ Kiloj Nevin sign
 ✓ SCHF
 ✓ Injury to A12
36. Pulled elbow is due to:-
 a) Fracture of the radius ✓
 b) Fracture of the ulna ✓
 c) Supracondylar fracture humerus ✓
 d) Subluxation of the radial head ✓
 e) Tear of the collateral ligaments.
✓ non-plane splint - Brachial plexus injury
✓ Kneefe binder splint - Median N - Palsy, Ulna N: palsy
37. Cock up splint is used in the injury of the :-
 a) Ulna nerve ✓
 b) Brachial plexus ✓
 c) Radial nerve ✓
 d) Medians nerve ✓
 e) Combined ulna and median nerve.
adduction + internal rotation produces a child of sound
38. Ortolani's test was discovered by Ortolani in 1948 for use in children of age:-
 a) 3 - 9 months ✓
 b) 0 - 1 month ✓
 c) 0 - 3 month ✓
 d) 3 - 12 months ✓
 e) 6 - 9 months ✓
✓ neonatal
39. According to Beckwith, for the accurate measurement of the axillary crutches, the length to be subtracted from the height of patient is:-
 a) 9 inches ✓
 b) 12 inches ✓
 c) 16 inches ✓ (40.6 cm)
 d) 21 inches ✓
 e) 10% of the patient height.

Ans. is 'B' is generally incomplete
 5. In children best remodelling is seen in fracture with:
 (AIIMS Feb 1997)
 A. Angulation in diaphysis B. Angulation in metaphysis
 C. Rotation in diaphysis D. Rotation in metaphysis
 Ans. is 'B' Angulation in metaphysis

- i. Post traumatic
- ii. Perthes disease (in repair stage)
- iii. Hemophilia (Hemophilic arthropathy)
- iv. Turner syndrome

40) The measurement of the height of the patella is accomplished by:-
 a) Blumensaat line - *best way to measure ACL injury*
 b) Insall - Salvati Index - *ratio of patella tendon length (Tb) to the length of patella (Pa)*
 c) Blackburne - peel index - *ratio of patella area to patella base*
 d) Garden index x
 e) All above

41. The so called dash board injury commonly causes:-
 a) ACL - injury
 b) PCL - injury
 c) Fracture patella
 d) Bony avulsion fracture
 e) Patella Ligament rupture

Female athlete triad

*Triad 1: low energy availability with/without menstrual dysfunction
 2. Low bone density
 3. Low bone density*

42. Tennis elbow is:-
 a) Lateral epicondylitis
 b) Medial epicondylitis
 c) Dislocation of the elbow
 d) Distal biceps tendon rupture
 e) Coronoid avulsion fracture.

43. Female athlete triad includes all except:-
 a) Osteopenia
 b) Anorexia
 c) Asthenia
 d) Amenorrhea
 e) None of the above.

*Non-impact is painful when you travel to the...
 impact closes the nerve...
 Painful when you travel to the...
 sensitive to the...
 - CSF*

44. Which property of pain does the gate control theory of Melzack and Wall characterize?
 a) Pain transmission
 b) Pain modulation
 c) Pain threshold
 d) Chronicity of pain
 e) Dysynchronisation of pain receptors.

45. Which test is most reliable for very small quantities of knee effusion:-

- a) Cross - fluctuation
- b) Patellar tap
- c) Bulge test
- d) Patella hollow test
- e) Arthrocentesis

*Fluid displacement Test
 Thompson Test - Tendback*

46. Thomas test detects:-

- a) Hyperextension of the knee
- b) Hyperextension of the femur
- c) Flexion of the knee
- d) Flexion of the hip
- e) Anterior glenohumeral dislocation.

47. The following are seen in bilateral congenital dislocation of the hip except:-
a) Genu valgus
b) Exaggerated lordosis
c) Waddling gait
d) Shenton's line is broken
e) Short stature

lumbal lordosis
Patella instability
All are there

48. The most sensitive test for carpal tunnel syndrome is:-
a) Tinel's sign
b) Phalen's test
c) Durkan's compression test
d) Trousseau's sign
e) Pain relief by steroid

lumbal lordosis
Patella instability
Wrist
Wrist
Carpal Tunnel Compression
97-98 sensit
90-95 sensit
most sensitive
vs Semmes-Weinstein Test
most sensitive of detect early CTS.

49. Hangman's fracture is the fracture of:-
a) C1
b) C2
c) C3
d) C4
e) C5

Jefferson's #
C2 pars interarticularis

50. The maximum acceptable saggital plane angulations in tibia shaft fractures is:-
a) 3°
b) 7°
c) 10°
d) 12°
e) 15°

tibia valgus = 5°
Varus = 5°
1-5
no

51. Empty can sign is seen in:-
a) Impingement syndrome
b) Frozen shoulder
c) Sprengel's shoulder
d) Elbow dislocation
e) Glenohumeral subluxation

Supraspinatus impingement or integrity of the supraspinatus tendon and acromion

52. The prominent sign of Volkman's ischaemia is:-
a) Pain on passive movement
b) Absence of arterial pulsation
c) Development of contracture
d) Pain out of proportion
e) Increased compartments turgidity

osteitis fibrosa cystica
Maxilla & mandible
that arises as result of excess osteoclastic activity.

53. Brown tumors are seen in:-
a) Hyper parathyroidism
b) Pigmented villonodular synovitis
c) Osteomalacia
d) Neurofibromatosis
e) Giant cell cancer

D. All of the above
 Ans. is 'B' is generally incomplete
 best remodelling is seen in fracture with:
 (AIIMS Feb 1997)

- i. Post inflammatory
- ii. Perthes disease (in repair stage)
- iii. Hemophilia (Hemophilic arthropathy)
- iv. Turner syndrome

54. The active form of vitamin D in the body is:-

- a) 25 - (OH) Vit D₃
- B** b) 1, 25 (OH)₂ Vit D₃ ✓ *1, 25 - dihydroxy cholecalciferol*
- c) 24, 25 (OH)₂ - Vit D₃
- d) 7-dehydro cholesterol
- e) 1 - (OH) Vit D₃

55. The most accurate study used in the work-up of osteoporosis is:-

- a) MRI
- C** b) Quantitative CT Scan
- C** c) DEXA ✓ *+125*
- d) Myelo CT Scan *<13*
- e) Ultrasound

56. The most efficient method of conditioning the muscle for improvement in power is:-

- a) Isotonic exercises
- b) Isometric exercises
- A or E?** c) Isokinetic exercises
- d) Pylometric exercises
- e) Combination of Isotonic and Isometric methods.

57. Terry Thomas sign is seen in:-

- a) Scaphoid fracture
- B** b) Scapholunate dissociation ✓ *Scapholunate ligament dissociation on AP view of wrist → Fall on outstretched hand*
- c) Fracture acetabulum
- d) Fracture neck of talus
- e) Meniscus cysts

Scapholunate ligament dissociation on AP view of wrist → Fall on outstretched hand
Scapholunate ligament ruptures resulting in separation of the lunate and scaphoid bones.

58. In Froment's sign - which muscle is tested:-

- A** a) Adductor pollicis ✓
- b) Opponens pollicis brevis
- c) Flexor pollicis brevis
- d) Abductor pollicis
- e) Flexor pollicis longus

Froment's sign
 ✓ For Palsy of ulnar nerve
 ✓ Reduced functionality of muscle weakness of the pinch grip.
 ✓ Tests strength of Adductor pollicis by ulnar nerve.

59. Velpeau bandage and sling and swathe splint are used in:-

- a) Shoulder dislocation
- b) Fracture scapula
- C** c) Acromio clavicular dislocation ✓
- d) Fracture clavicle
- e) Elbow dislocation

Indication for Velpeau Bandage
 1. Acromio clavicular dislocation
 2. Fracture clavicle
 3. Shoulder dislocation
 # Most effective in elbow dislocation

60. Most common cause of neuropathic joint is:-

- a) Leprosy
- B** b) Diabetes ✓
- c) Rheumatoid arthritis
- d) Syphilis
- e) B₁₂ deficiency