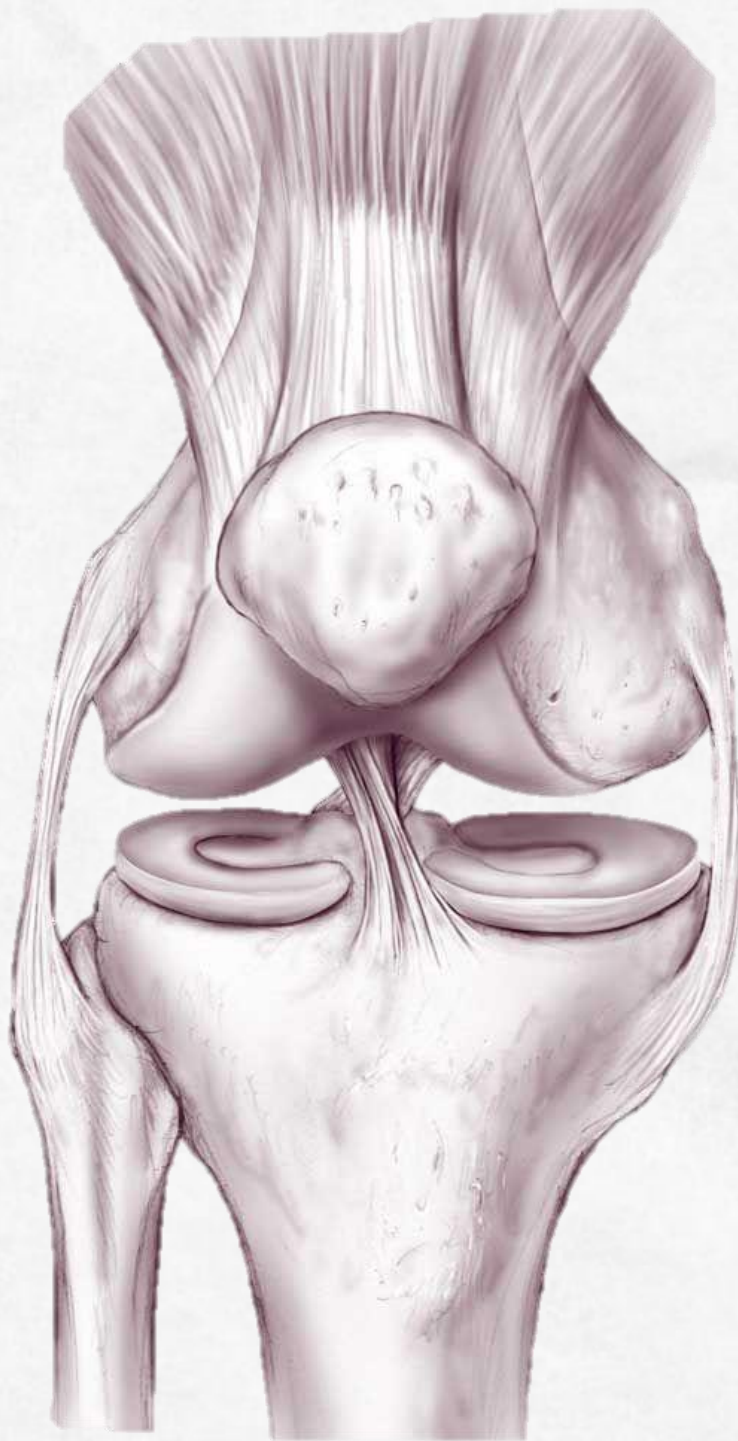


Orthopedic surgery



MiniOSCE - Past papers

Done by: Malek Abu Rahma

Orthopedic surgery

1. A 14-year-old girl presents with a noticeable asymmetry in her shoulders and waist, with a visible spinal curve on examination.

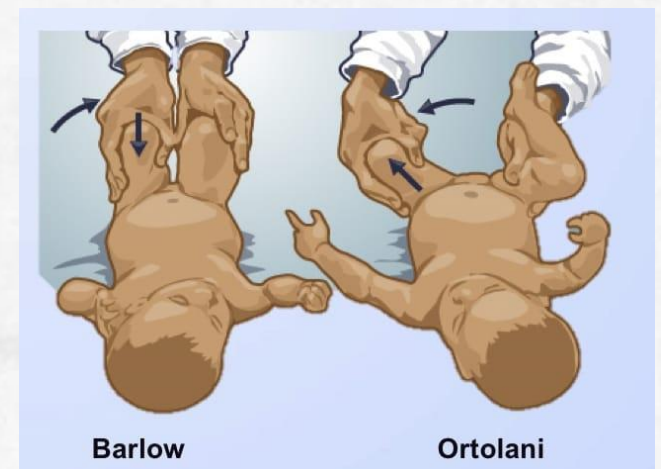
- 1) Type of scoliosis?
- 2) Name of the test?



ANSWER : 1) Structural Idiopathic adolescence scoliosis
2) Adam's forward bending test

2.

- 1) Names of the two tests?
- 2) Imaging modality for a 1-month age boy?



ANSWER : 1) Ortolani and Barlow
2) Ultrasound

3. A 30-year-old male presents with severe pain out of proportion to injury, unresponsive to analgesia, tightness, and numbness in the lower leg following a tibial fracture.

- 1) Diagnosis?
- 2) Management?
- 3) Signs and symptoms?



ANSWER : 1) Compartment syndrome 2) Fasciotomy
3) Extreme pain, increased on passive extension, swollen tense limb, etc...

4. A 45-year-old woman experiences sharp knee pain, swelling, and a clicking sensation after twisting her knee while turning during a tennis match, suggestive of a medial meniscus tear.

- 1) Name the structure examined?
- 2) Name the test?



ANSWER : 1) Medial meniscus
2) McMurray test

Orthopedic surgery

5. A 3-year-old child presents with bowed legs, delayed walking, and growth retardation, with a history of limited sun exposure and poor dietary intake of vitamin D.

- 1) Diagnosis?
- 2) Management?

ANSWER : 1) Rickets disease
2) Vitamin d, calcium and calcitriol



6. Female patient in her 30s with pain upon prolonged sitting and taking the stairs:

- 1) Diagnosis?
- 2) Management?

ANSWER : 1) Patellofemoral syndrome
2) Conservative



7. A 65-year-old woman presents with chronic knee pain.

- 1) Symptoms of this patient other than pain?
- 2) What are the possible complications for total knee replacement?

ANSWER : 1) Decreased range of motion which affected daily life activities, morning stiffness less than 30 minutes & swelling.
2) DVT, PE, bleeding, infection or nerve injury



8. A 6-month-old infant presents with asymmetric thigh folds and limited hip abduction on the right side during a routine well-baby check

- 1) What is the name of the angle?
- 2) What is the normal range?
- 3) Mention 2 other measurements used to assess DDH on x-ray?

ANSWER : 1) Acetabular index angle
2) <30
3) Hilgenreiner line, Shenton line & Perkin line



Orthopedic surgery

9.

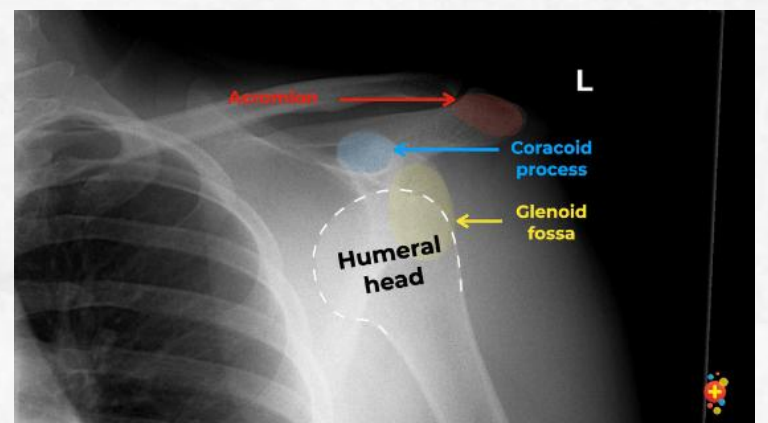
- 1) What is the diagnosis?
- 2) Give one differential?



ANSWER : 1) Ganglion cyst
2) Lipoma

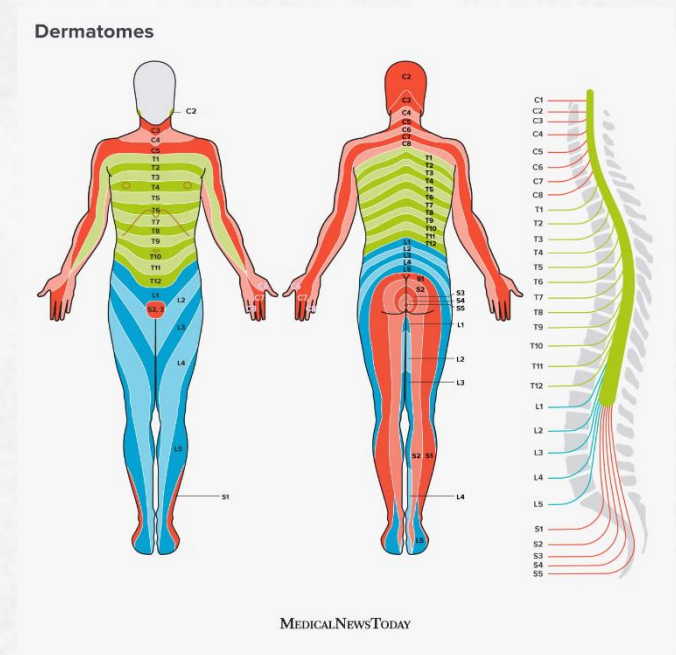
10. What are the labeled structures with arrows?

ANSWER : 1) Acromion process
2) Coracoid process
3) Glenoid
4) Clavicle
5) Head of humerus



11. Name the labeled dermatomes.

ANSWER : 1) L2
2) L4
3) L5



12. A 35-year-old male is brought to the emergency department after a high-speed motorcycle accident, presenting with severe pelvic pain, external rotation of the legs, and hypotension

- 1) Describe the abnormality?
- 2) How would you manage?



ANSWER : 1) Open book Fracture
2) ABCDE, then pelvic binder and surgical fixation

Orthopedic surgery

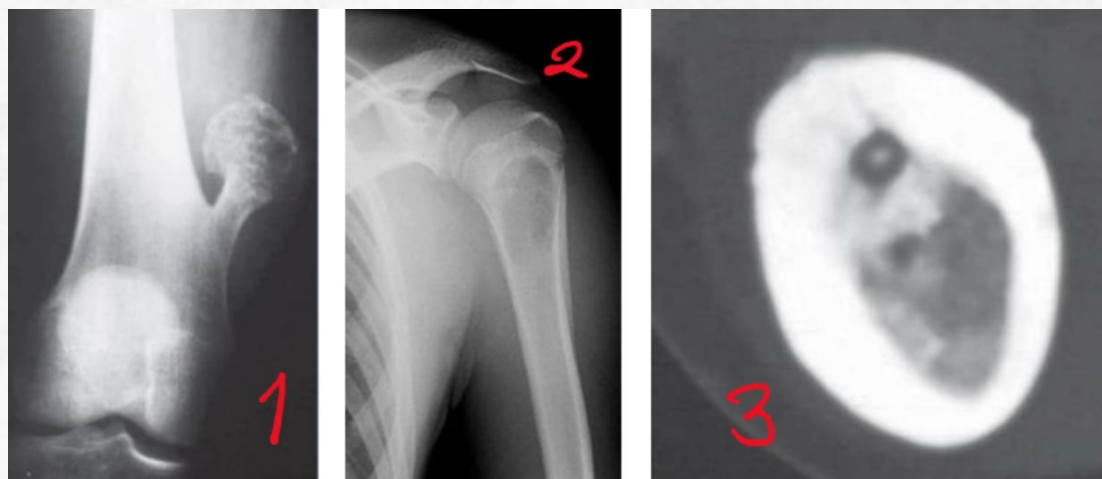
13. A 25-year-old athlete experiences a sudden "pop" in the knee followed by immediate pain, swelling, and instability after pivoting during a soccer game

- 1) Diagnosis?
- 2) Mention the best test that can help you establish the diagnosis?
- 3) Arterial supply of the injured structure?



ANSWER : 1) ACL injury 2) Lachman's test
3) Branch of the popliteal artery

14. Identify these lesions



ANSWER : 1) Osteochondroma 2) Simple bone cyst** 3) Osteoid osteoma

15. A patient who presented with knee pain following recent trauma.

- 1) What is the type of reduction?
- 2) What is the type of fixation?



ANSWER : 1) Anatomical reduction
2) Absolute stability

16. 11 YO male patient presented with pain, redness, swelling of one of the knee joints with discharge. There was a picture showing the joint.

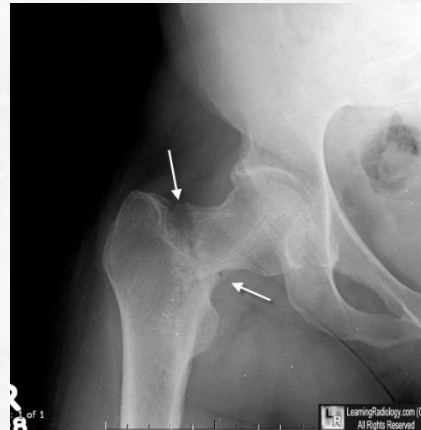
- 1) Diagnosis?
- 2) Investigations to confirm the diagnosis?
- 3) Treatment?
- 4) One complication?



ANSWER : 1) Septic arthritis
2) CBC, CRP, ESR, culture, synovial fluid analysis
3) Emergent drainage & antibiotics
4) Destruction of cartilage, Osteomyelitis

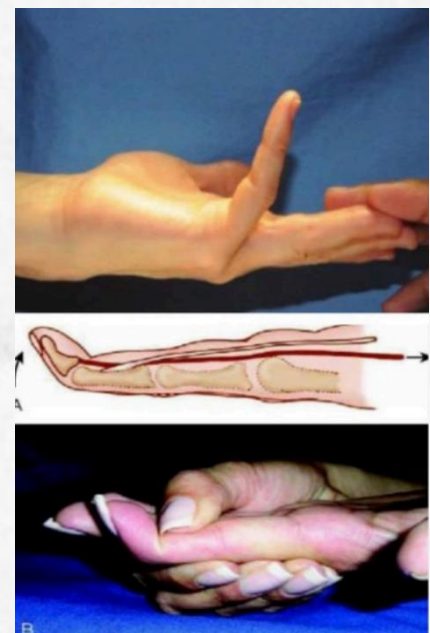
Orthopedic surgery

17. Identify these fractures:



ANSWER : 1) Wedge Compression 2) Femur neck fracture 3) Colle's fracture

18. Which muscles are responsible for the flexion of these joints?



ANSWER :

- 1) PIP → flexor digitorum superficialis
- 2) DIP → Flexor digitorum profundus

19. A patient who was involved in a road traffic accident presented to the emergency department.

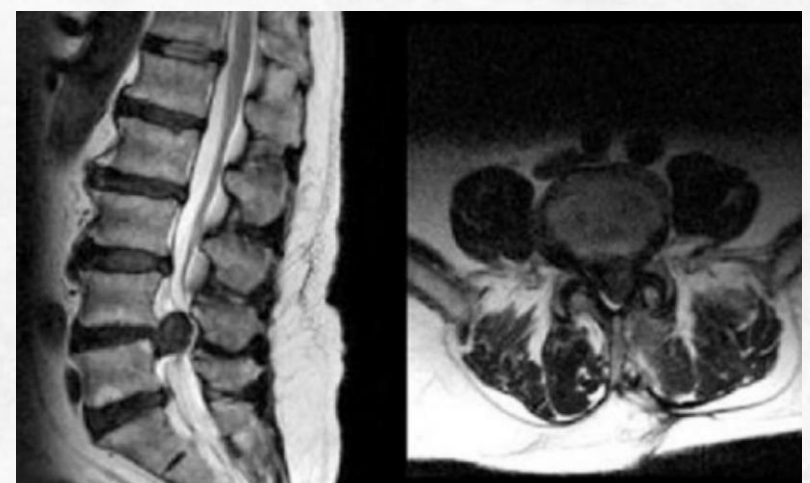
- 1) What's the first step of management for this patient?
- 2) How would you manage the wound?



ANSWER : 1) ATLS(ABCDE approach), Give warm IV fluids (namely Ringer's lactate) & stop the bleeding
2) Analgesia, antibiotics, anti-tetanus toxoid & adequate irrigation

20. A 45-year-old office worker presents with acute lower back pain radiating down the left leg, accompanied by numbness and tingling in the foot, after lifting a heavy object

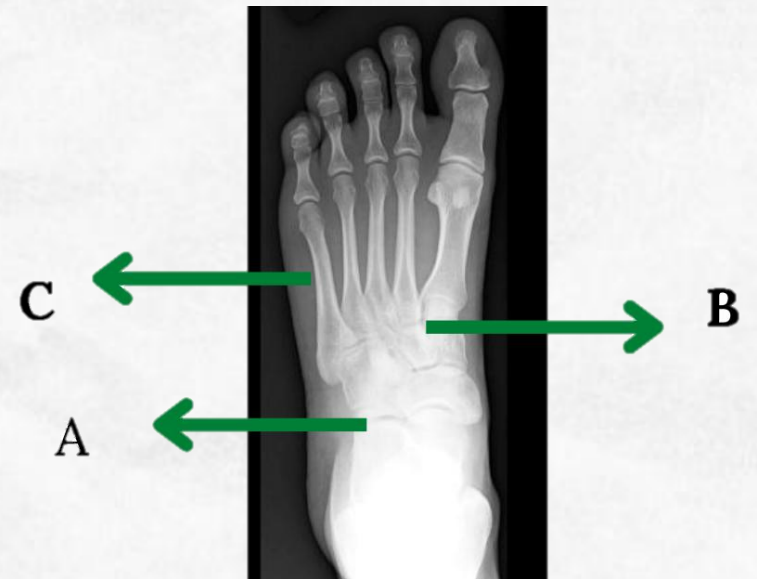
- 1) Diagnosis?
- 2) Mention two pathoanatomical features?



ANSWER : 1) Disc herniation
2) Nucleus Pulposus Protrusion, Annulus Fibrosus Tear and disc bulge

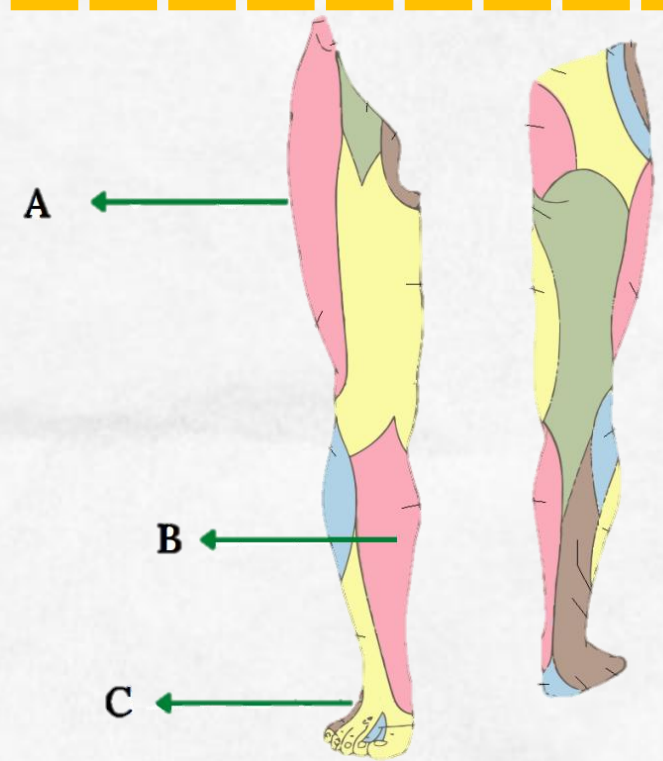
Orthopedic surgery

21. Name the bones in the foot :



ANSWER : A) cuboid
B) medial cuneiform
C) 5th metatarsal bone

22. name the innervation of lower limb:



ANSWER :
A) lateral cutaneous nerve of the thigh
B) saphenous nerve
C) superficial peroneal nerve

23. Name of the fractures:



ANSWER : 1) supracondylar fracture 2) Cheyfer fracture 3) subtrochanteric fracture

24. Name of innervation in the following:



ANSWER : 1) radial nerve 2) common peroneal nerve

Orthopedic surgery

25. Q36. A patient with history of diabetes and distal femur fracture 6 months ago presented with discharge.

- 1) Diagnosis?
- 2) Most common causative organisms?
- 3) Management?
- 4) Investigations?



ANSWER : 1) Chronic osteomyelitis 2) Staphylococcus aureus
3) IV antibiotics, surgical debridement
4) Blood culture, CBC, bone biopsy, culture and MRI

26.

- 1) Name of the deformities?
- 2) Treatment?



ANSWER : 1) Club foot deformity (CAVE)
2) Serial ponsetti cast ,correcting the deformities in the following order: cavus, adductus, varus, equinus (CAVE)

27.

- 1) Mechanism of action :
- 2) side effects :



ANSWER : 1) Cox 1 and cox 2 inhibitors 2
2) nausea , vomiting , Gi symptoms....

28. RTA accident with the following fracture :

- 1) type of reduction :
- 2) Type of fixation :

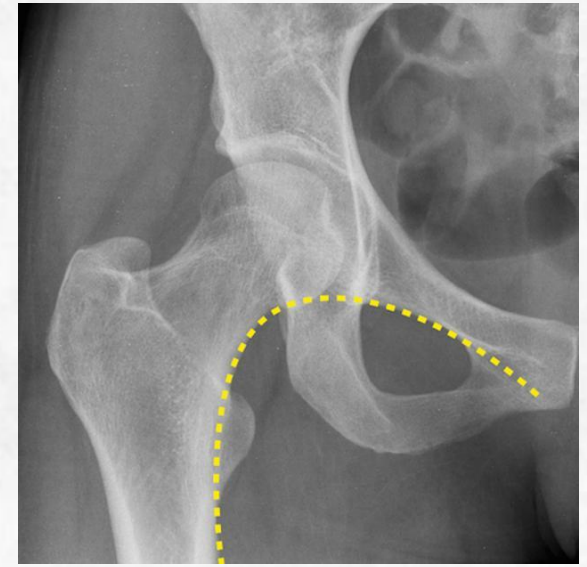


ANSWER : 1) functional
2) relative

Orthopedic surgery

29.

- 1) Name line :
- 2) Risk factors:



ANSWER : 1) shenton line
2) female , family history, breech delivery

30.

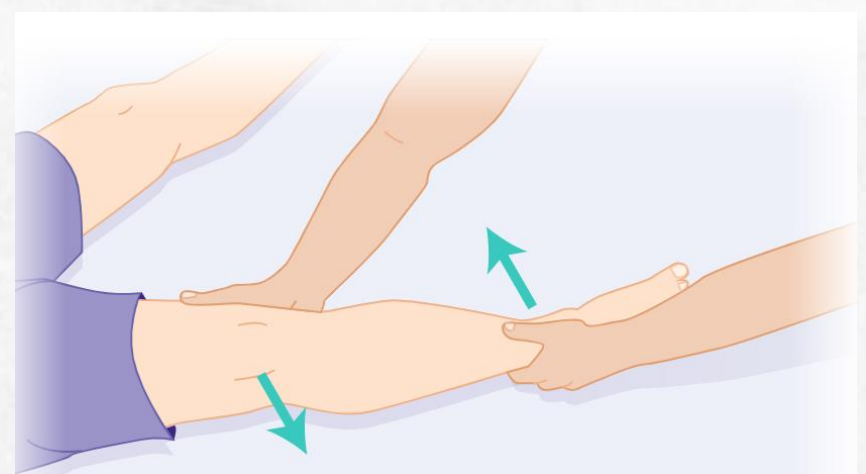
- 1) identify lesion :
- 2) Describe lesion :



ANSWER : 1) osteochondroma
2) pediculated , well defined

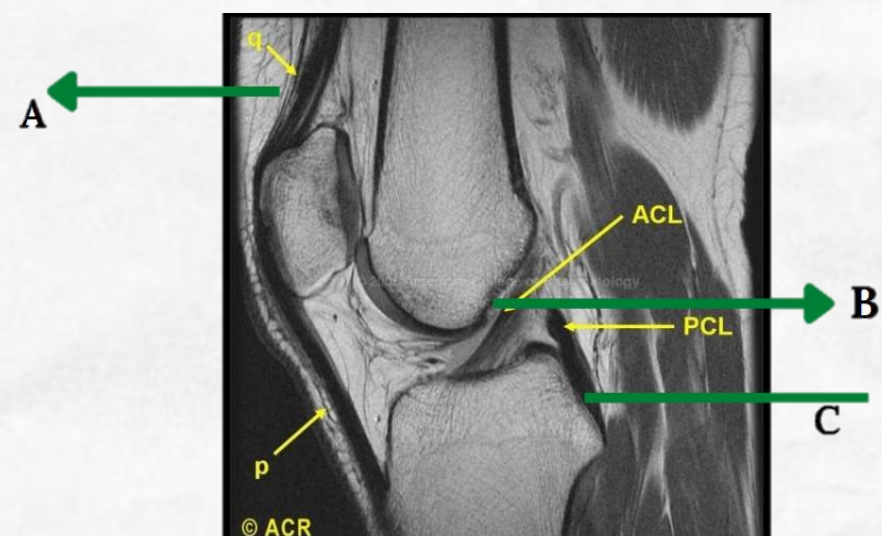
31.

- 1) name this test?
- 2) Tested structure?



ANSWER : 1) Varus stress test
2) LCL

32. name the pointed structures:

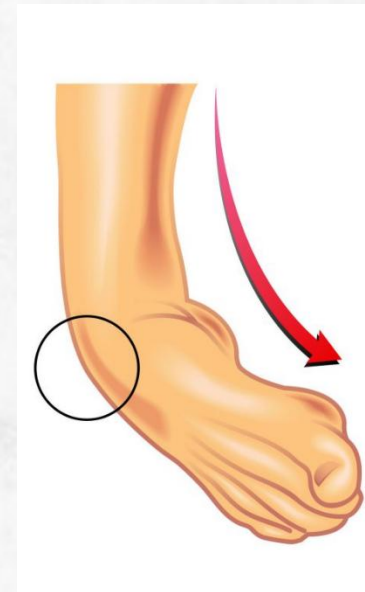


ANSWER : A) Quadriceps tendon B) ACL C) PCL

Orthopedic surgery

33. basketball player fell on ankle in this position :

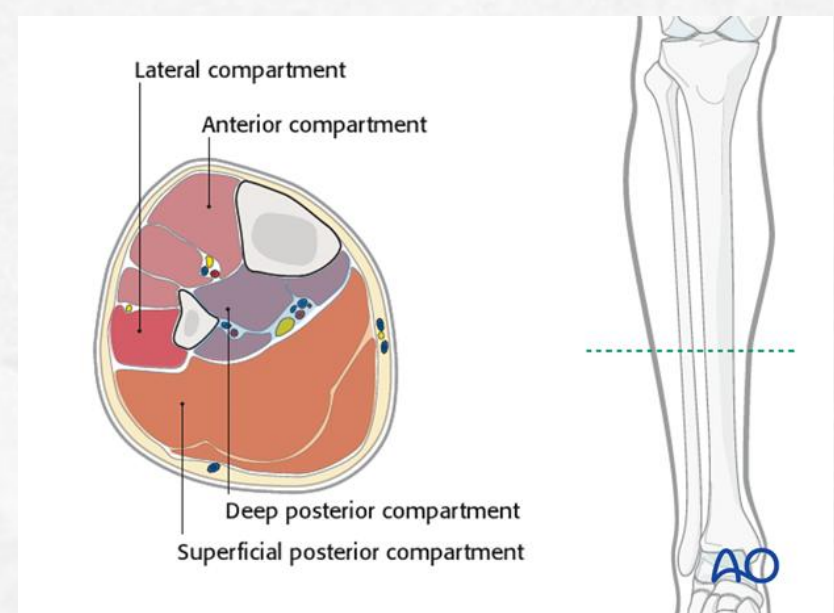
- 1) Diagnosis
- 2) treatment
- 3) Which ligament has been torn



ANSWER : 1) ankle sprain
2) rest ,ice , compression, elevation
3) Anterior talofibular ligament

34. comminuted tibial fracture, pain

- 1) Diagnosis?
- 2) Which compartment ?
- 3) Treatment ?



ANSWER : 1) compartment syndrome 2) Posterior (حسب الصورة) 3) fasciotomy

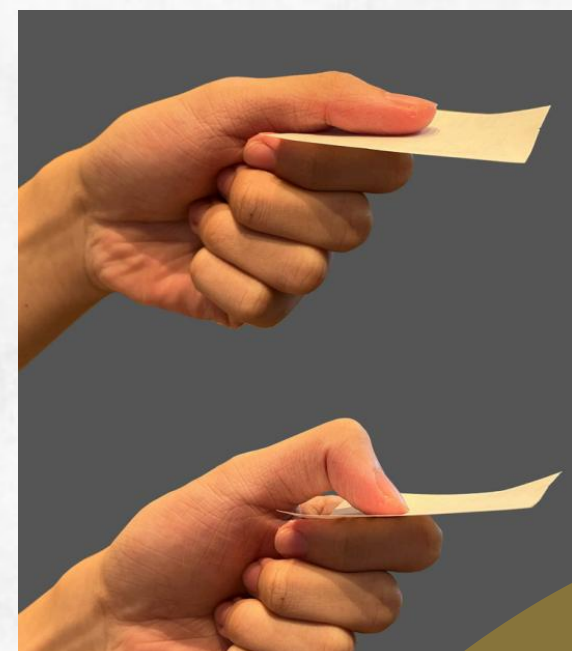
35. RTA open wound

- 1) initial management:
- 2) Management to prevent infection:

ANSWER : 1) ABCDE
2) irrigation, antibiotic, analgesia, anti tetanus

36.

- 1) Name of this test:
- 2) Narve tested :



ANSWER : 1) froments test
2) Ulnar

Orthopedic surgery

37. 51 year old female present with hip pain :

- 1) diagnosis ?
- 2) Best Surgical treatment?

ANSWER : 1) Right hip osteoarthritis
2) Total hip replacement



38.

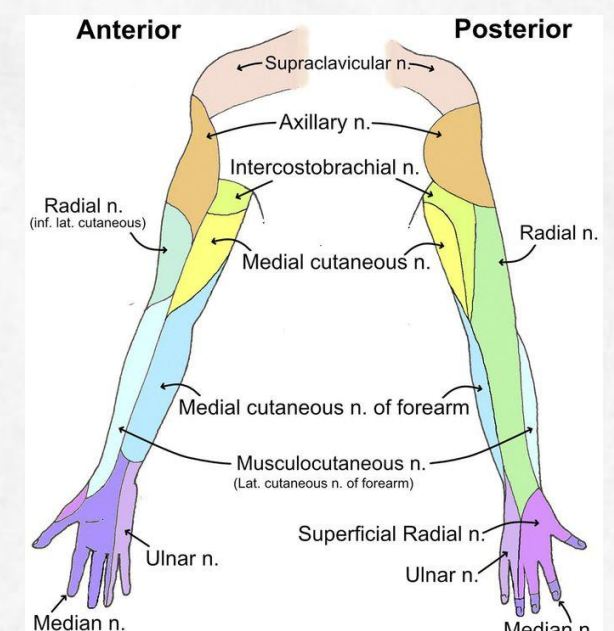
- 1) What anatomical structure is it testing?
- 2) How can you confirm your diagnosis?



ANSWER : 1) Rotator Cuff/Shoulder (Subscapularis muscle)
2) Shoulder MRI

39. Name the sensory nerves supplying labeled areas:

ANSWER :
1) Radial nerve
2) Median nerve
3) Axillary nerve



40.

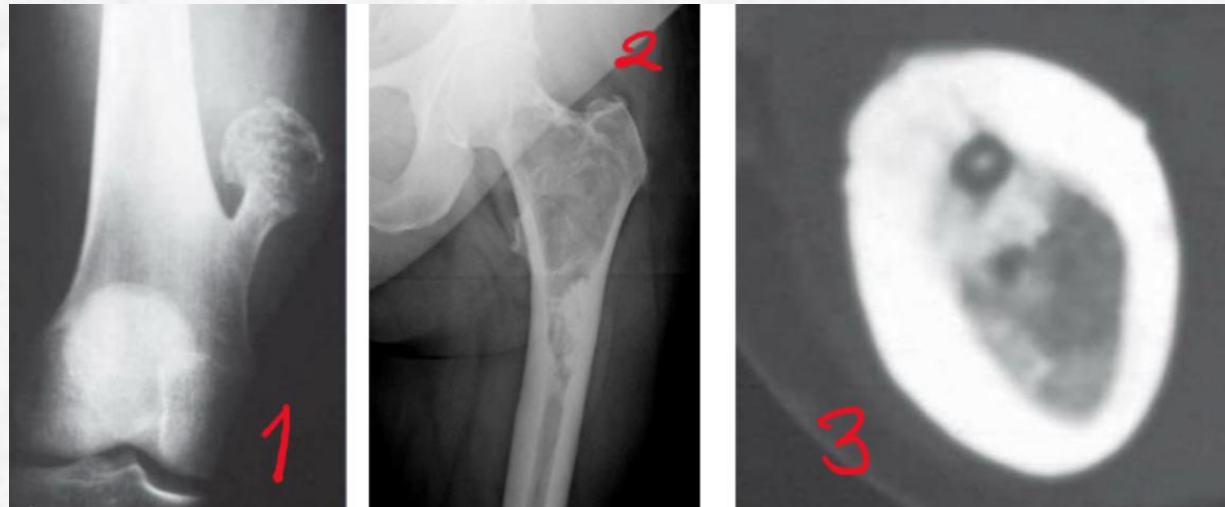
- 1) Diagnosis?
- 2) Metabolic disease associated with it?
- 3) What's the management?

ANSWER : 1) compression fracture
2) Osteoporosis
3) Conservative or Surgery



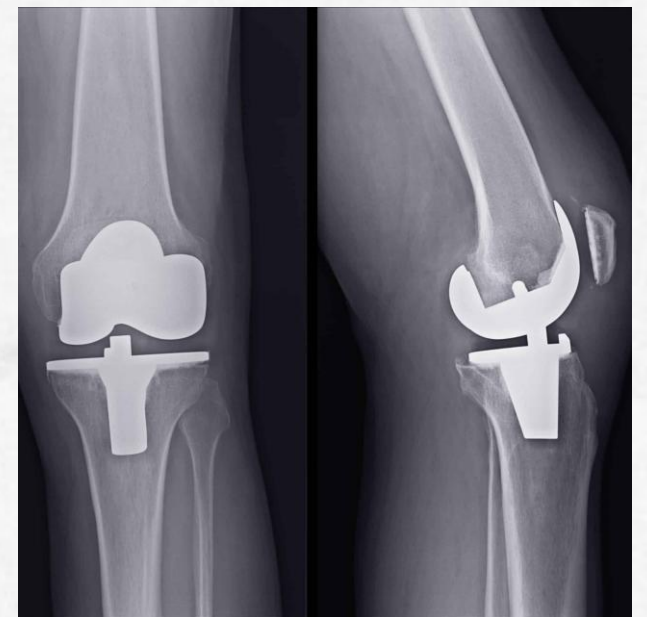
Orthopedic surgery

41. Identify these lesions



ANSWER : 1) Osteochondroma 2) Fibrous dysplasia 3) Osteoid osteoma

42. A patient recently underwent orthopedic surgery. Four days postoperatively, she was noted to have hypoxia, tachycardia and tachypnea



- 1) Most likely cause?
- 2) Other possible complications?
- 3) Best next step for investigation?
- 4) How to treat it?

ANSWER : 1) PE 2) DVT, infection, bleeding or nerve injury (most commonly the common peroneal nerve) 3) CT Pulmonary Angiography 4) Anticoagulant

43. Describe the fracture?



ANSWER : Closed simple spiral extra-articular fracture

44. 72- year-old presented with progressively worsening back pain, noticeable spinal curvature, and a change in posture

- 1) Most probably the type?
- 2) Investigations?



ANSWER : 1) Degenerative Scoliosis
2) Spinal MRI

Orthopedic surgery

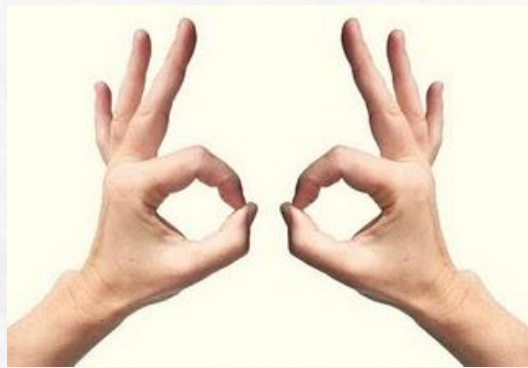
45. Tibial plateau fracture

- 1) Type of reduction (anatomical or functional)
- 2) Type of fixation (absolute or relative)



ANSWER : 1) anatomical reduction
2) absolute stability

46. Which nerves are tested?



ANSWER : 1) Ok sign → median nerve 2) Finger abduction → ulnar nerve

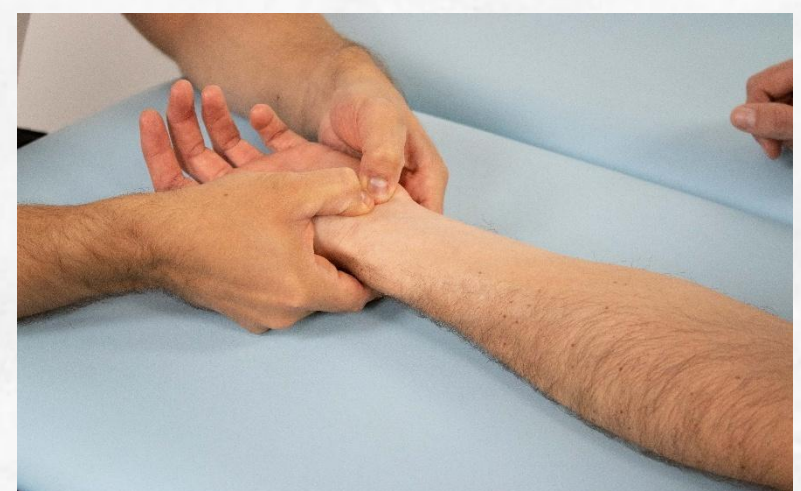
47. Name the following deformities:



ANSWER : 1) Winged scapula 2) Hallux valgus 3) Syndactyly

48.

- 1) What is this test?
- 2) What anatomic structure are we testing?



ANSWER : 1) Compression Test
2) Carpal tunnel (median nerve)

Orthopedic surgery

49. Finger with locking, pain and can't be extend.

- 1) Diagnosis?
- 2) Management?



ANSWER : 1) Trigger finger
2) Conservative + surgery

50. Describe the lesion



ANSWER : Well defined mixed lytic and sclerotic lesion. A sclerotic rim is seen. No cortical destruction or periosteal reaction are

51. Open fracture.

- 1) First initial management?
- 2) Name of classification?



ANSWER : 1) ATLS 2) Gustillo

52.

- 1) Name of the test?
- 2) What structure does it examine?



ANSWER : 1) Lachman test
2) ACL

Orthopedic surgery

53) A 40-year-old construction worker falls from a height and lands on his feet, presenting with severe back pain.

1) Diagnosis?

2) Name another spinal fracture?



ANSWER : 1) Burst fracture

2) Wedge compression and seatbelt fractures

54. An x-ray of the pelvis, it asked to identify:



ANSWER : 1) Acetabulum 2) Femur neck 3) Lesser trochanter

55. Name the following tests:



ANSWER :

1) Faber test

2) Empty can test

56. Name the fractures



ANSWER :

1) Jones

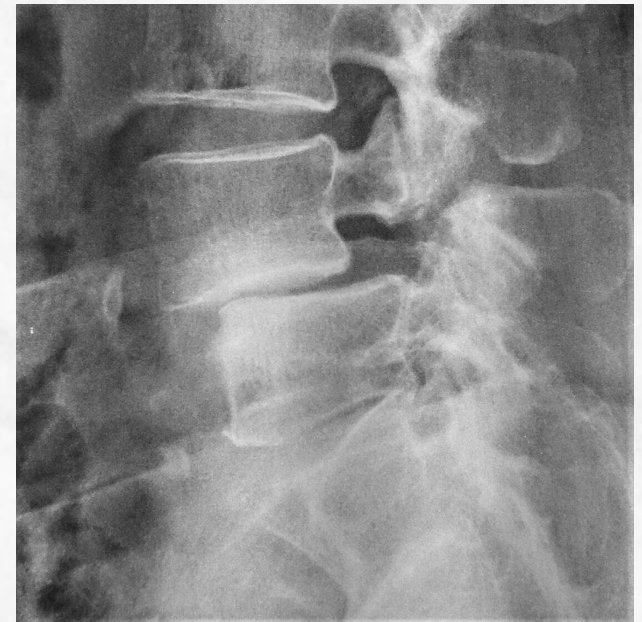
2) Bimalleolar

3) Monteggia

Orthopedic surgery

57. A lateral x-ray of the lumbar vertebrae of a patient complaining of lower back pain that increases with extension & shortness of breath

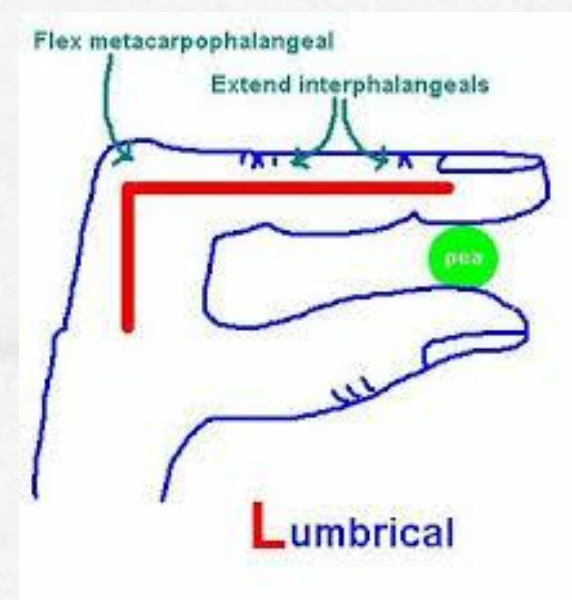
- 1) Diagnosis?
- 2) What grade?
- 3) Other investigations?



ANSWER : 1) Spondylolisthesis 2) 2? 3) spine MRI

58.

- 1) What muscle causes this action?
- 2) Nerve innervation?



ANSWER : 1) Lumbricals 2) median and ulnar nerve

59.

- 1) Diagnosis?
- 2) Name 2 radiological findings?



ANSWER : 1) Osteosarcoma
2) Sunray appearance & Codman's triangle

60.

- 1) Name the test?
- 2) What does it examine?



ANSWER : 1) Thompson test (calf compression test).
2) Complete Achilles tendon rupture

Orthopedic surgery

61.

- 1) Name the structure examined?
- 2) Name the test?

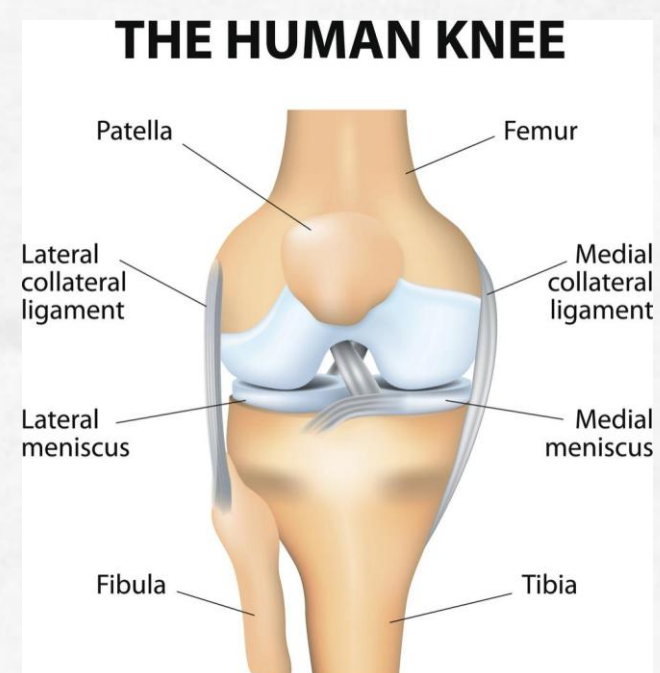


ANSWER : 1) Lateral meniscus 2) McMurray test

62. Identify the labeled structures:

ANSWER :

- 1) ACL
- 2) Medial meniscus
- 3) Lateral Collateral ligament



63. Name the fractures



ANSWER : 1) Tibial plateau 2) Subtrochanteric 3) Galeazzi

64. Name the fractures

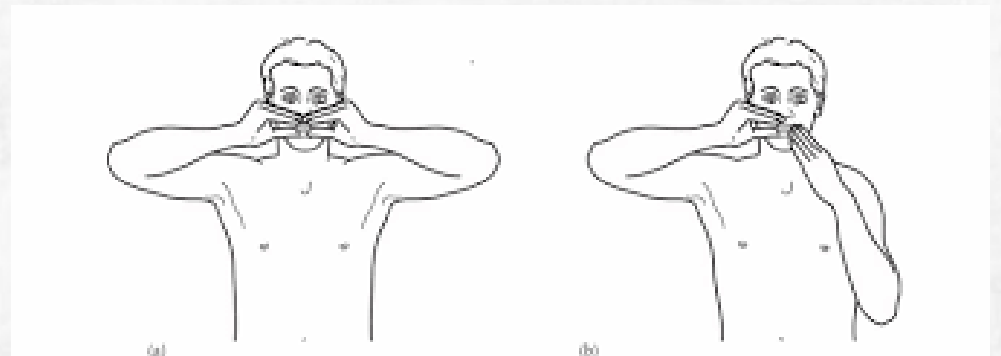


ANSWER : 1) Subcapital 2) Boxer's (5th MCP fracture) 3) Wedge Compression

Orthopedic surgery

65.

- 1) Name of the test?
- 2) What does it examine?



ANSWER : 1) Hornblower's test
2) Infraspinatus and teres minor

66.

- 1) What type of nonunion?
- 2) Management?



ANSWER : 1) Atrophic nonunion
2) Debridement of the necrotic bone, bone grafting and fixation.

67. X-ray of humeral shaft fracture

- 1) Which nerve will be injured?
- 2) The clinical presentation if this nerve was injured?



ANSWER : 1) Radial nerve
2) Wrist drop with loss of sensation over the dorsal aspect of the 1st web space of the hand

68.

- 1) Diagnosis?
- 2) The nerve that will be injured?

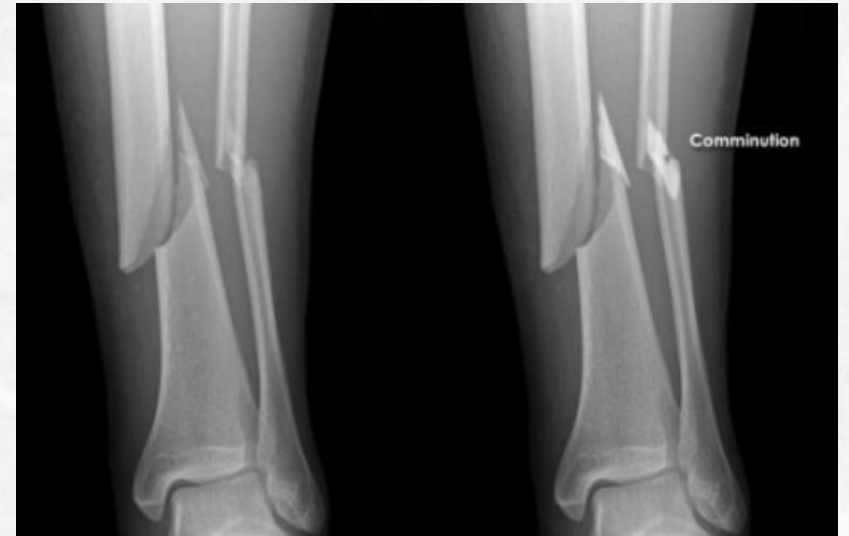


ANSWER : 1) Anterior Shoulder dislocation
2) Axillary nerve

Orthopedic surgery

69. X-ray of tibial and fibular fracture

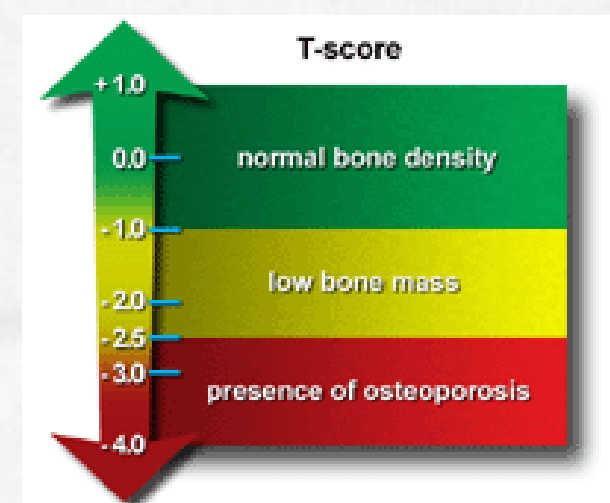
- 1) Describe the personality of the fracture.
- 2) The patient developed severe pain despite giving him analgesia, what is your diagnosis?



ANSWER : 1) Comminuted, extra-articular closed...
2) Compartment syndrome

70. A picture of a DEXA scan result of -3.0

- 1) Diagnosis?
- 2) Mention 2 risk factors.



ANSWER : 1) Osteoporosis
2) Old, woman, family history, etc...

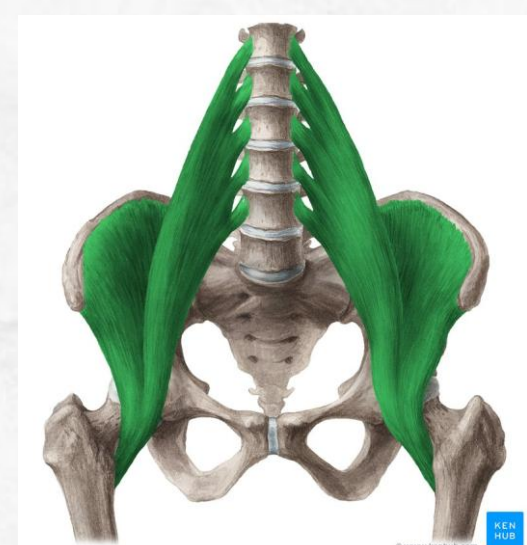
71. Xray:

- 1) Diagnosis?
- 2) Mention the 3 principles done in fracture management.



ANSWER : 1) intertrochanteric fracture
2) Reduction, immobilization and rehabilitation

72. What is the function of this muscle?



ANSWER : External rotation of the hip (iliopsoas)

Orthopedic surgery

73. What's the structure being tested?



ANSWER : Medial collateral ligament

74. X-ray of a fracture involving the physis

- 1) What is the classification system used for physeal fractures?
- 2) What type is it?



ANSWER : 1) SalterHarris Classification
2) It was extending to the epiphysis so 3

75. Name the identified bones:

ANSWER :
1) Scaphoid
2) Hamate
3) Ulna



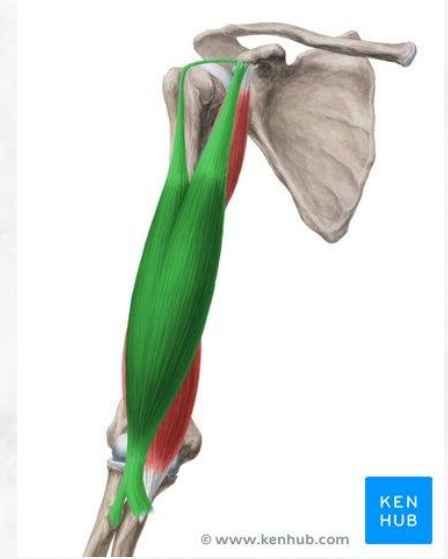
76. Ballet dancer is suffering from pain and tenderness in her second metatarsal bone .Diagnosis?



ANSWER : March (Stress fracture)

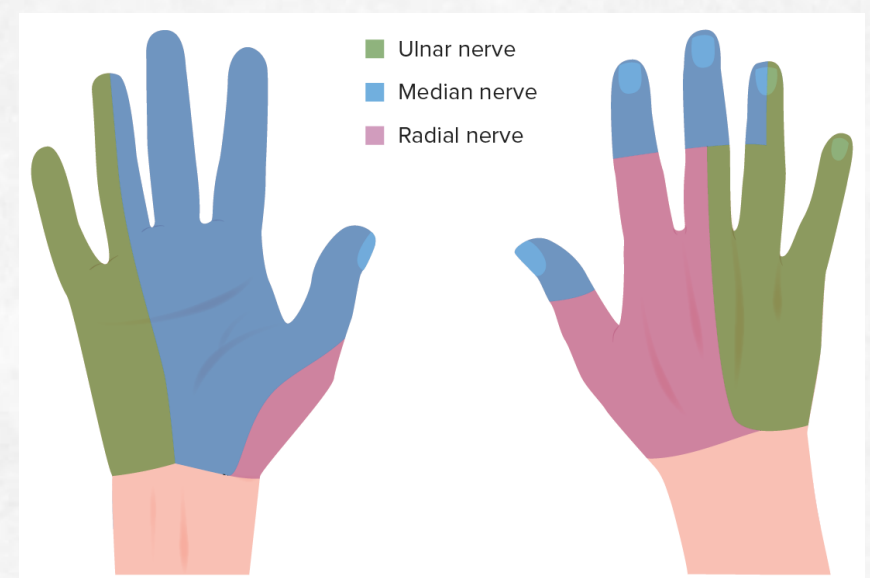
Orthopedic surgery

77. What is the innervation?



ANSWER : Musculocutaneous nerve

78. Picture of 3 sensation points over the hand, what nerves are they supplied by?



ANSWER :

- 1) median
- 2) ulnar
- 3) radial

79. An x-ray of the elbow, it asked to identify:



**ANSWER : 1) Radial head
2) Olecranon process**

80.

- 1) What is the diagnosis?
- 2) What is the most common injured nerve?



**ANSWER : 1) Supracondylar humerus fracture
2) median**

Orthopedic surgery

81.

- 1) Describe the findings?
- 2) Is it most likely benign or malignant?



ANSWER :

- 1) Histiocytic fibroma, eccentric metaphyseal well defined mixed lytic and sclerotic lesion. A sclerotic rim is seen. No cortical destruction or periosteal reaction are seen.
- 2) Benign

82.

- 1) What is the diagnosis?
- 2) What screening modality do you use for a 6 weeks old infant?



ANSWER : 1) DDH
2) Ultrasound

83.

- 1) What is the classification name?
- 2) What grade?



ANSWER : 1) salter harris.
2) SH2 (extending from metaphysis to growth plate)

84. Swollen red hot leg after right THR.

- 1) what is the diagnosis?
- 2) What is the best test?



ANSWER : 1) DVT
2) Doppler Ultrasound

Orthopedic surgery

85. The patient fell out on outstretched hand

- 1) What is the diagnosis?
- 2) What is the most likely underlying pathology?



ANSWER : 1) smith fracture 2) Osteoporosis

86. Spiral femur fracture in a young adult

- 1) Do you use relative stability or absolute?
- 2) Do you use functional reduction or anatomical?



ANSWER : 1) Relative 2) Functional

87. History of trauma to shoulder while delivering the baby.

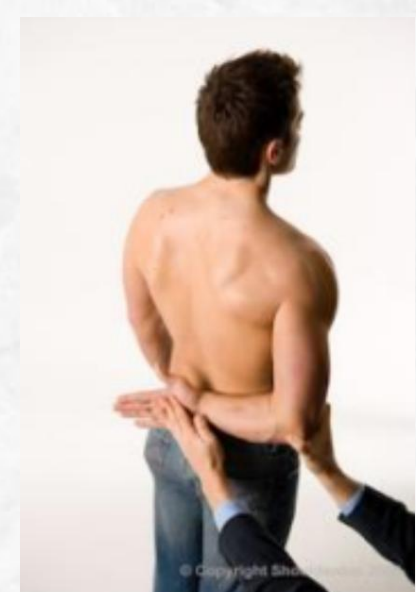
- 1) Diagnosis?
- 2) What is the injured part?
- 3) Describe the deformity?



**ANSWER : 1) Erb's palsy
2) upper trunk (C5-C6)
3) Arm hangs close to the body & internally rotated**

88.

- 1) What muscle is this test for?
- 2) What action?



**ANSWER : 1) subscapularis.
2) internal rotation**

Orthopedic surgery

89.

- 1) Diagnosis?
- 2) What nerve injury cause winged scapula?



ANSWER : 1) winged scapula
2) long thoracic

90.

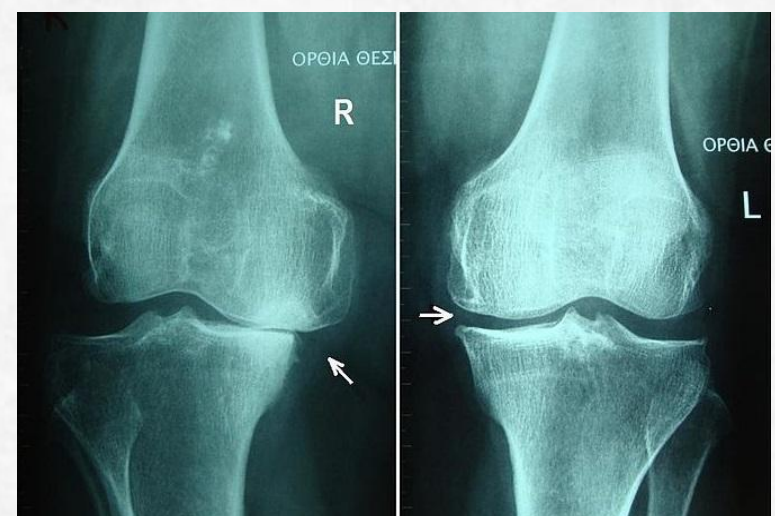
- 1) Diagnosis?
- 2) What is the present complication?



ANSWER : 1) scaphoid fracture
2) Nonunion

91.

- 1) What is the diagnosis?
- 2) What findings support ur diagnosis?
- 3) Management?



ANSWER : 1) Bilateral knee osteoarthritis
2) Loss of joint space, Osteophytes & Subchondral sclerosis
3) Depend on patient: conservative (lifestyle modifications like weight loss and exercise and walking, NSAIDS, steroidal injection, physiotherapy) Or Surgery

92. Patient has history of sickle cell disease and hip pain.

- 1) Describe the abnormality?
- 2) Diagnosis?

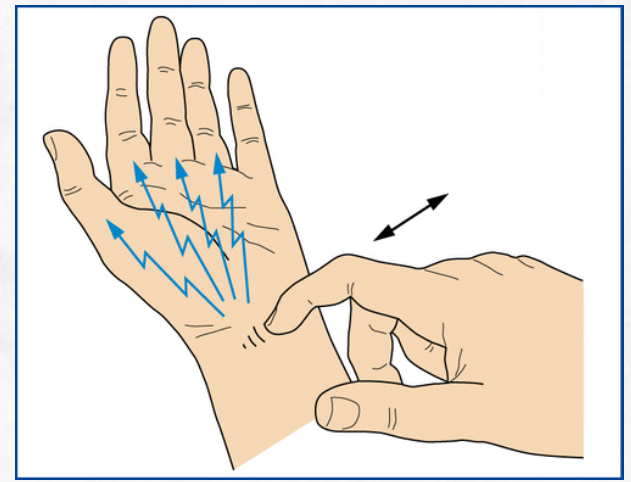


ANSWER : 1) radiolucency of the femoral head
2) Perthes disease

Orthopedic surgery

93. Positive test in history and positive symptoms, what is the most likely

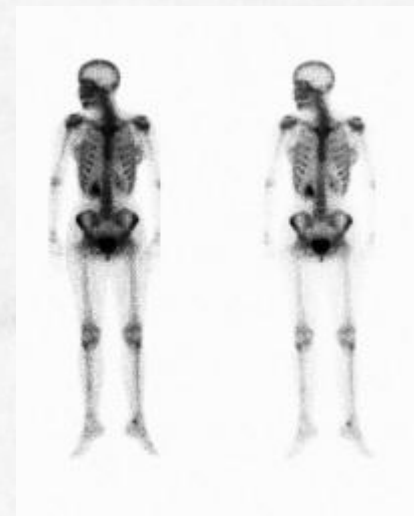
- 1) Diagnosis?
- 2) Test name?



ANSWER : 1) Carpal tunnel syndrome
2) tinel's sign

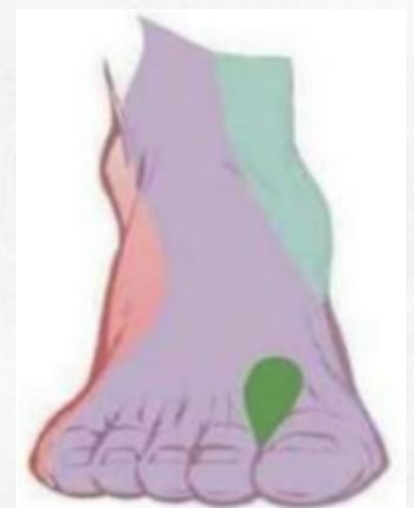
94.

- 1) Name of the imaging modality used in the picture?
- 2) Most common probable type of malignant tumor of the bone?



ANSWER : 1) Bone scan
2) Secondary bone tumors

95. Name the nerves that supply these areas

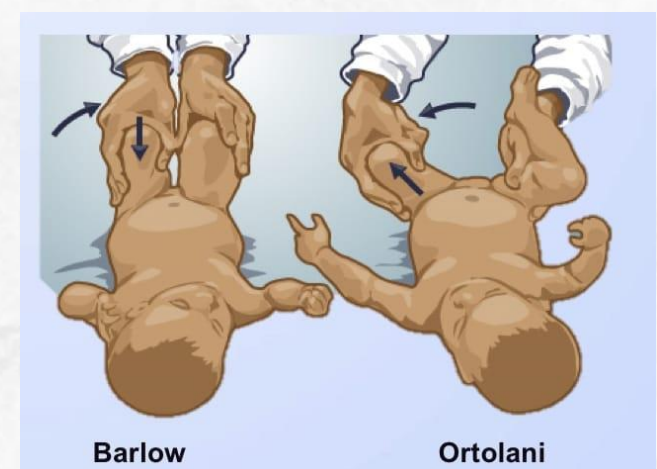


ANSWER :

- 1) Green: deep peroneal nerve
- 2) Purple: superficial peroneal nerve
- 3) Pink: Sural nerve

96.

- 1) What is the examiner looking for?
- 2) The best management if the test was positive?



ANSWER : 1) DDH
2) Pavlik harness

Orthopedic surgery

97.

- 1) Deformity?
- 2) Mention other 2 extra-skeletal abnormalities associated with this deformity?

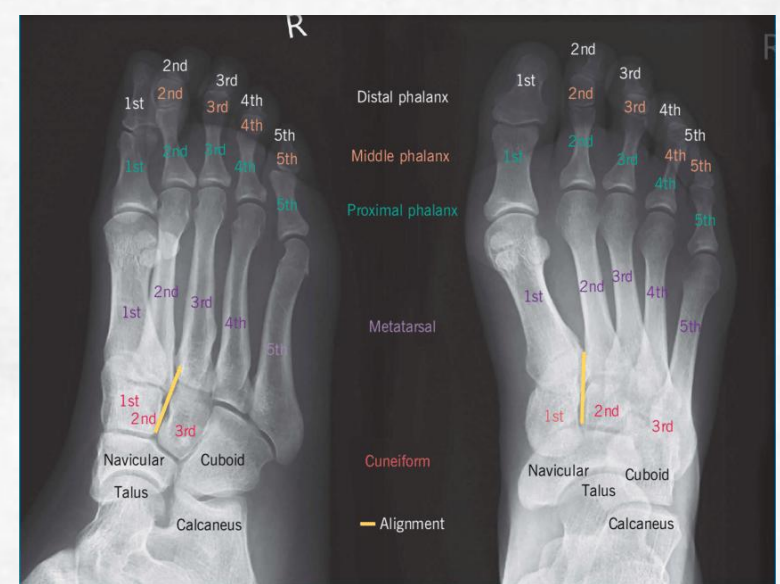


ANSWER : 1) Club hand

- 2) Holt-Oram syndrome, TAR syndrome, Fanconi's anaemia and VATER/VACTERL syndrome?**

98.

- 1) Name the identified bones:
- 2) Against what bone we can feel the dorsalis pedis artery?



ANSWER : 1) 1. Calcaneus 2. Navicular 3. Cuboid 4. Middle phalanx of the 3rd toe
2) Navicular bone

99.

- 1) Name of this fracture?
- 2) Define what bones are involved?

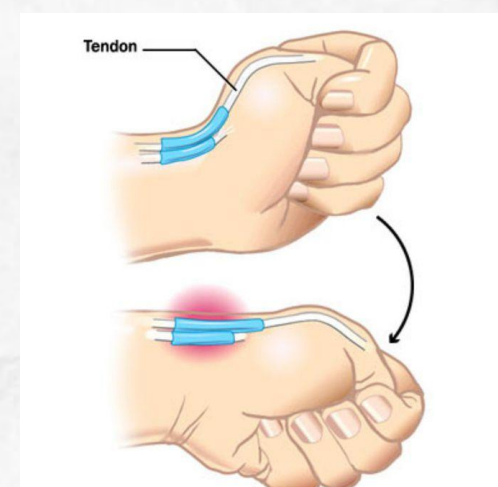


ANSWER : 1) Monteggia fracture

- 2) proximal 1/3 ulna fracture with an associated radial head dislocation

100. Frankelstein test

- 1) Positive test indicates what?
- 2) Muscles affected?
- 3) Which extensor compartment is affected?



ANSWER : 1) De quervain tenosynovitis

- 2) abductor pollicis longus and extensor pollicis brevis tendons
- 3) First compartment

Orthopedic surgery

101.

- 1) Picture of?
- 2) What movement can't the patient do?



ANSWER : 1) Achilles tendon rupture
2) Plantar flexion of the foot

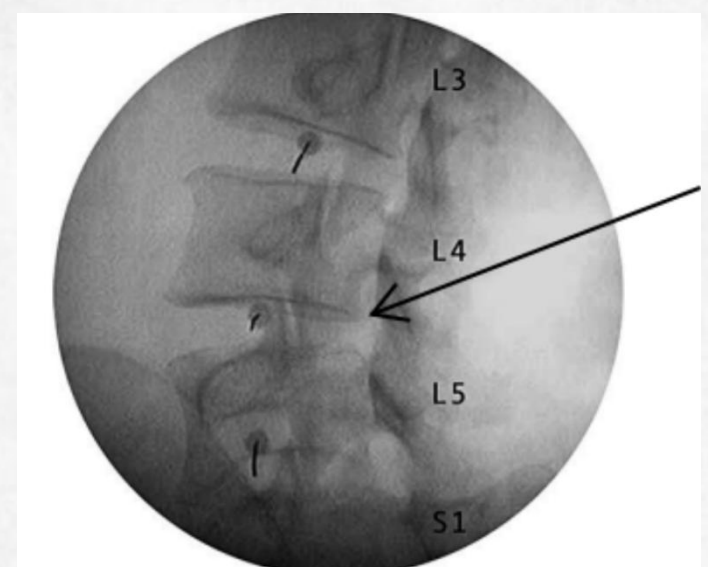
102.

- 1) What's the name of this device?
- 2) Mention two complications for inappropriate use of it?



ANSWER : 1) Pavlik harness
2) AVN of femur head / femoral nerve palsy

103. Which nerve root is affected in case of paracentral herniation?



ANSWER : L5 nerve root

104. A 25-year-old girl playing basketball got injured.

- 1) What's the abnormality?
- 2) What's the function of the injured structure?



ANSWER :

- 1) ACL tear
- 2) It stabilizes the knee joint by preventing excessive forward movements of the tibia or limiting rotational knee movements

Orthopedic surgery

105

- 1) Diagnosis?
- 2) Area of vertebra involved?



ANSWER : 1) Spondylolysis
2) facet joint area (pars interarticularis)

106. Motor Vehicle accident:

- 1) Diagnosis?
- 2) Management?



ANSWER : 1) comminuted tibial and fibular shaft fracture
2) ABCDE, then open reduction internal fixation.

107. X-ray of a fracture involving the physis

- 1) What is the classification system used for physeal fractures?
- 2) What type is it?



ANSWER : 1) Salter Harris Classification
2) 4

108. An x-ray of the hip joint of a newborn

- 1) Diagnosis?
- 2) Mention 2 measurements used to assess DDH on x-ray?
- 3) Mention 2 risk factors?



ANSWER : 1) DDH with dislocation
2) Hilgenreiner line, Shenton line, Perkin line & acetabular index angle
3) Family history, frank breech, first born, etc...

Orthopedic surgery

109. An X-Ray of a 19-year-old female patient.

- 1) Type of scoliosis?
- 2) Other investigations?



ANSWER : 1) Structural Idiopathic adolescence scoliosis
2) CT, MRI

110. An x-ray of a bone mass in a 14-year-old patient.

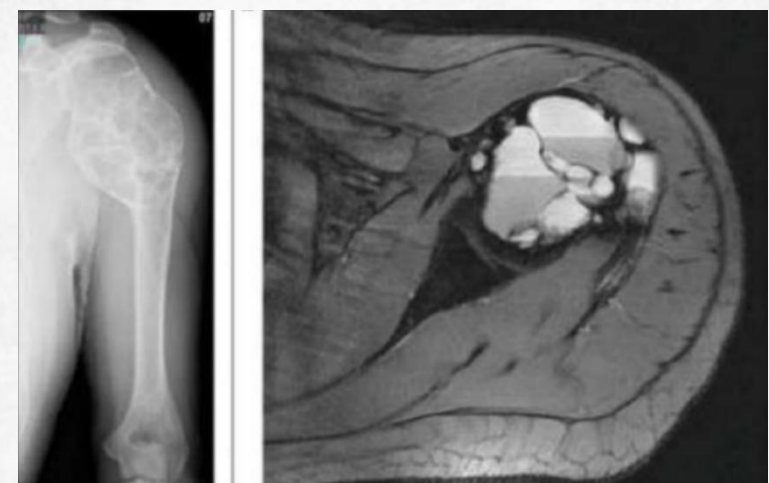
- 1) Diagnosis?
- 2) Treatment?



ANSWER : 1) Pedunculated Osteochondroma
2) Observe if asymptomatic, otherwise resection.

111. An x-ray & MRI of the proximal humerus.

- 1) Findings seen on imaging?
- 2) Diagnosis?



ANSWER : 1) Well defined multiloculated lytic lesion causing significant ballooning and thinning of the cortex.
2) Aneurysmal bone cyst

112. A 24YO female volleyball player came complaining of knee pain and tenderness over the superior border of the patella. Lateral knee x-ray showed elevation of the patella (patella alta).

- 1) Diagnosis?
- 2) Management?



ANSWER : 1) inflammation of the quadriceps tendon (should be patellar tendon rupture??)
2) (RICE) Analgesia, rest, NSAIDs, applying ice... etc

Orthopedic surgery

113. An x-ray of the hip joint of a 20-year-old female patient who's complaining of hip pain

- 1) Diagnosis?
- 2) What would you do to relieve her pain & treat her?



ANSWER : 1) SCFE
2) Minimal weight bearing & screw fixation

114.

- 1) Name of the test?
- 2) What structure does it examine?
- 3) Diagnosis if positive?



ANSWER : 1) Impingement test (Hawkins Kennedy)
2) Supraspinatus muscle & tendon
3) Tendon impingement or bursitis

115.

- 1) Its mechanism of action?
- 2) How would you advise the patient who's going to take this drug?
- 3) Its side effects?



ANSWER : 1) Bisphosphonate (inhibition of osteoclasts (prevents bone resorption)).
2) Drink a lot of water with it and remain in an upright position after taking the drug for at least 30 minutes.
3) Nausea, heartburn and constipation or diarrhea.

116. An X-Ray of the forearm of a 30-Year-Old male shows a fracture.

- 1) Type of reduction (anatomical/functional)?
- 2) Type of fixation (absolute/relative)?



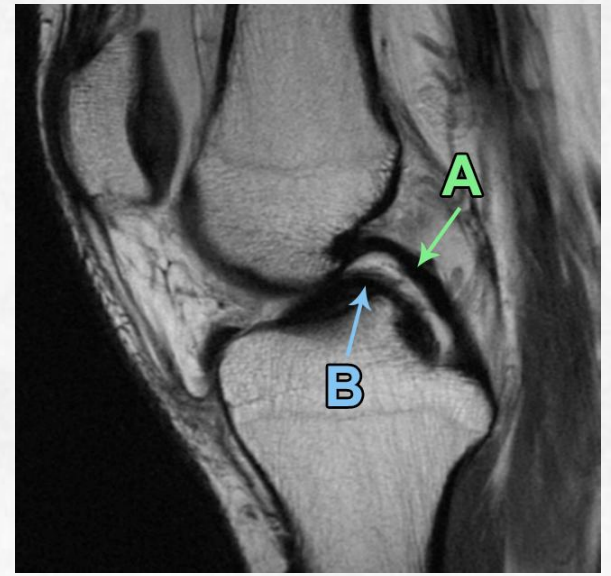
ANSWER : 1) Anatomical
2) Absolute

Orthopedic surgery

117. A sagittal MRI of the knee showing double PCL sign.

1) Describe what you see?

2) What tests can you use in physical examination to confirm the diagnosis?



ANSWER : 1) Double PCL sign, indicating meniscal tear (bucket handle tear)
2) McMurray test

118. A 25-year-old girl complaining of ankle pain first thing in the morning then decreases with walking.

1) Diagnosis?

2) Management?



ANSWER : 1) Plantar fasciitis
2) Analgesia, Physiotherapy & Steroid injections

119. A 22-year old complaining of distal knee pain when playing sport.

1) Diagnosis?

2) Management?



ANSWER : 1) Osgood-schlatter disease
2) Conservative RICE (ice, rest, analgesia)

120. An x-ray of the foot, it asked to identify:

ANSWER :

1) Base of the 5th metatarsal

2) Talus

3) Navicular bone

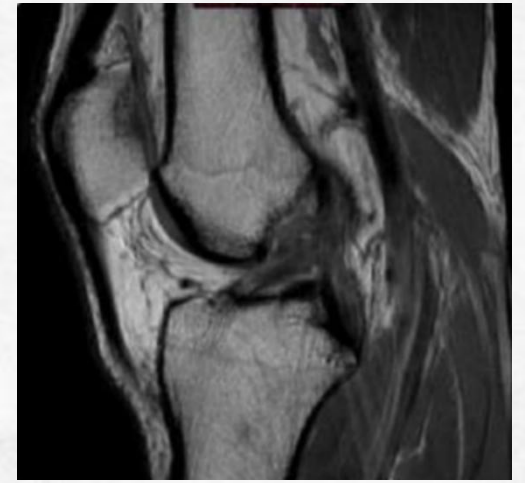
4) What tendon inserts into the base of the 5th metatarsal? Peroneus brevis tendon



Orthopedic surgery

121. A patient twisted his knee while playing sports.

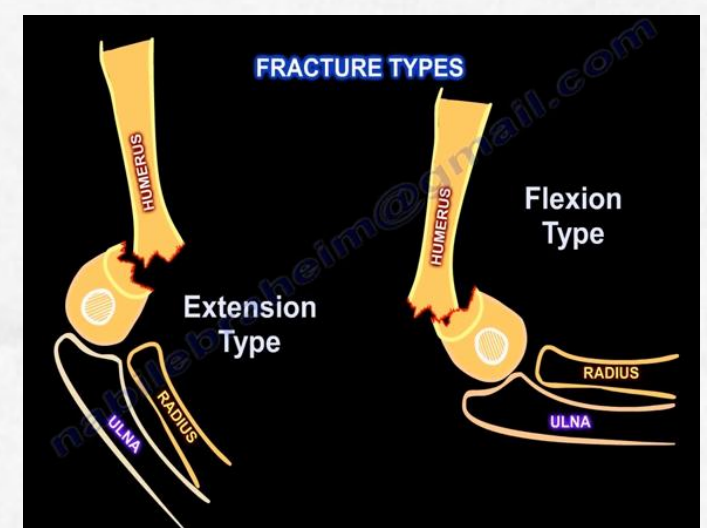
- 1) Describe what you see?
- 2) Diagnosis?
- 3) Mention tests that can help you establish the diagnosis?



ANSWER : 1) Hyper-intensity in the area of anterior cruciate ligament.
2) ACL injury
3) Anterior drawer test, lachman test

122. An image of a fracture was shown.

- 1) What is the name of this fracture?
- 2) Type of fracture (flexion-extension)?



ANSWER : 1) Supracondylar fracture of the humerus
2) Extension

123. Patient with history of diabetes and neuropathy

- 1) What's the diagnosis?
- 2) Other differential?



ANSWER : 1) charcot foot with tarsal bone distruction
2) septic arthritis

124.

- 1) Diagnosis?
- 2) Underlying genetic/molecular defect?



ANSWER : 1) Osteogenesis imperfecta
2) Mutations in the COL1A1 and COL1A2 which provide instructions for making proteins that are used to assemble type I collagen

Orthopedic surgery

125.

- 1) Name of deformity?
- 2) Types?



ANSWER : 1) Pes planovalgus (flat foot)
2) flexible and rigid, tested by asking the patient to plantar flex and stand on toes

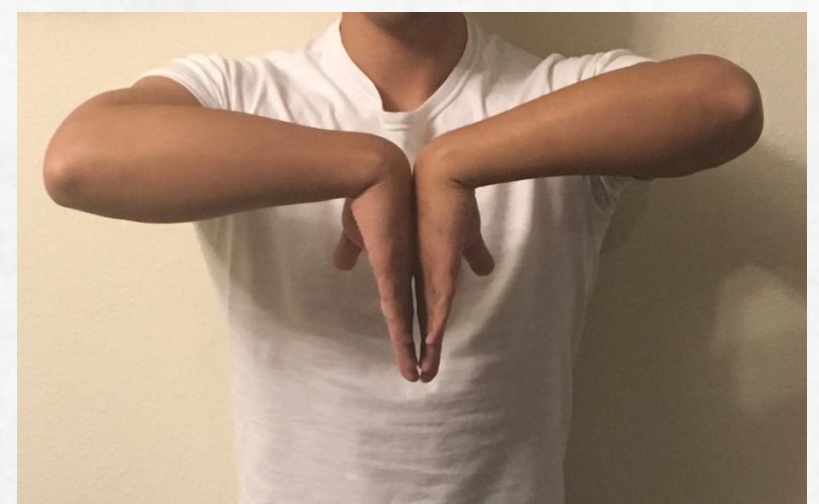
126. Picture of Paracetamol, Vit D Supplements, Celecoxib:

- 1) What's the maximum dose of paracetamol?
- 2) What's the mechanism of action of Vitamin D supplements?
- 3) Why is Celecoxib better than Diclofenac sodium?

ANSWER : 1) 4 grams
2) Helps absorption of calcium from the gut
3) It's a selective COX-2 inhibitor so it doesn't cause gi side effects

127.

- 1) Name of the test?
- 2) Diagnosis?



ANSWER : 1) phanel test
2) carpal tunnel syndrome

128. A patient presented with the following deformity

- 1) What is the deformity?
- 2) What is the affected structure?



ANSWER : 1) Duputrens contracture
2) palmar fascia

Orthopedic surgery

129.

- 1) What is the mechanism of action of paracetamol, celecoxib?
- 2) Side effects of declofenac?

ANSWER : 1) Paracetamol is a COX-3 inhibitor. Celecoxib is a COX-2 inhibitor
2) GI disturbances & Renal impairment

130. 40-year-old male was being examined due to shoulder pain

- 1) What is the structure being tested?
- 2) What is a positive result?



ANSWER : 1) Supraspinatus
2) pain or weakness

131. 13 years old boy, fell down, complains of arm pain

- 1) Describe the abnormality?
- 2) Diagnosis?



ANSWER : 1) discontinuity of the cortex & lytic lesion
2) Pathologic fracture

132. 1 year old girl was brought to the clinic due to spine deformity her X ray was shown

- 1) Describe the abnormality?
- 2) What is the diagnosis?



ANSWER : 1) hemivertebra
2) congenital scoliosis

Orthopedic surgery

133. Which nerve root is examined using this test?



ANSWER : L3 - L4

134. Which nerve root is tested by this reflex?



ANSWER : Ankle jerk S1-S2

135.

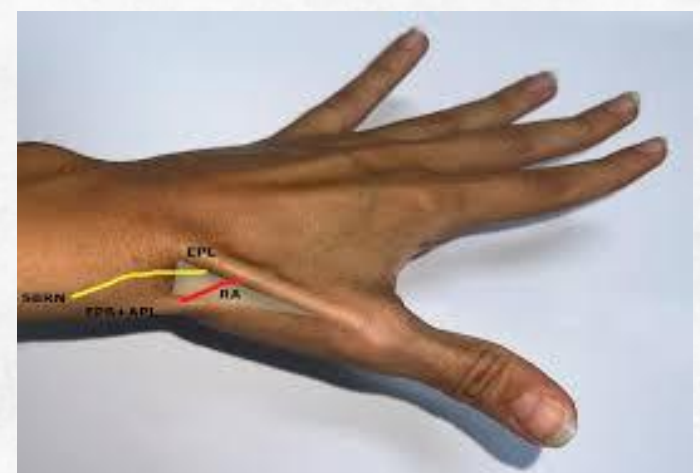
- 1) What is the diagnosis?
- 2) What is the cause?
- 3) What is the management?



**ANSWER : 1) Olecranon fracture
2) avulsion of the triceps tendon
3) Absolute internal fixation**

136. Snuff box

- 1) What are the boundaries?
- 2) What does it indicate if a patient had a trauma ?



**ANSWER : 1) Lateral: APL/EPB / Medial: EPL / Floor : Scaphoid and Trapezium
2) Scaphoid fracture**

Orthopedic surgery

137.

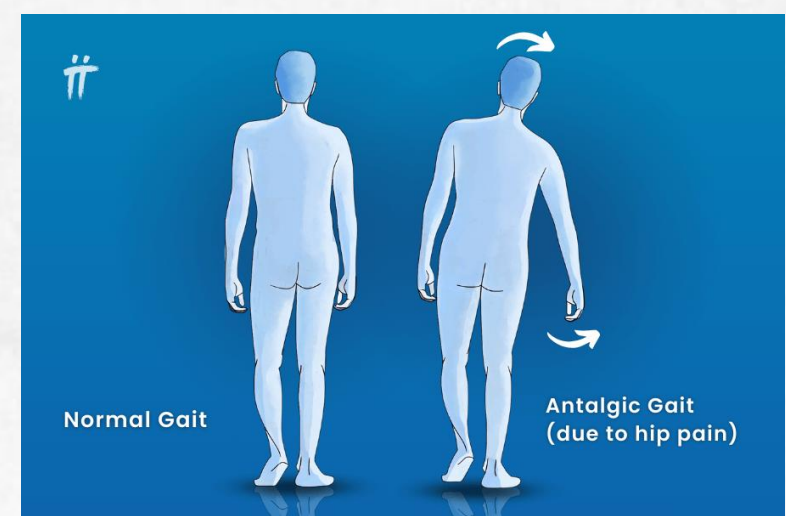
- 1) What is the diagnosis?
- 2) what is the principle of fracture management?



ANSWER : 1) intertrochanteric fracture
2) Reduction / Immobilization (Fixation) / Rehabilitation

138. Pt. came to you with this gate {antalgic gate}
(he is leaning toward the Rt side)

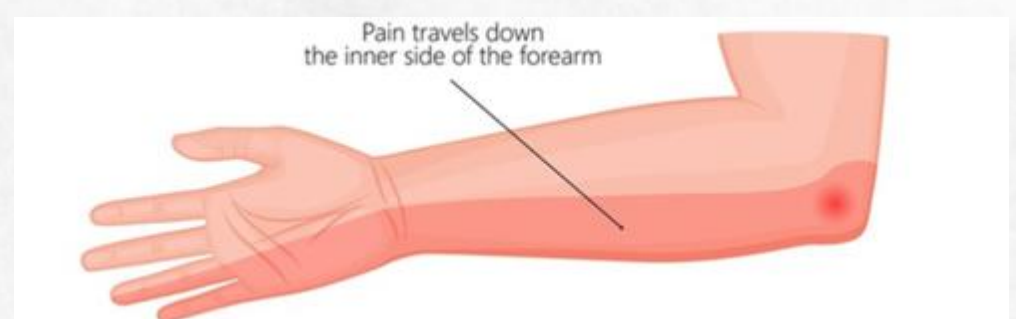
- 1) Which side is abnormal?
- 2) What is the pathology?



ANSWER : 1) Rt. Side
2) Weakened glutes (Abductor Muscles: Gluteus Medius Gluteus Minimus)

139. Pt. came to you with numbness over this
distribution and pain on tapping on medial
epicondyle

- 1) What is the nerve?
- 2) What is the diagnosis?



ANSWER : 1) Ulnar nerve
2) Ulnar nerve compression (cubital tunnel syndrome)

140. Patient Came to ER with tibial shaft fracture
and managed conservatively, smoker, after a
period of time x-ray showed this finding.

- 1) What's your diagnosis?
- 2) What are the causes?



ANSWER : 1) Atrophic non-union
2) Vascular (PAD) and metabolic (DM or smoking)

Orthopedic surgery

141.

- 1) What is the name of this sign?
- 2) structure is injured in such case?



ANSWER : 1) Chronic Knee Hyperextension (Genu Recurvatum)
2) PCL Rupture

142.

- 1) What is the name of the following Device?
- 2) What is it used for?



ANSWER : 1) tourniquet
2) to prevent excessive bleeding in the

143.

- 1) What's the material used in this cast?
- 2) two instructions to the patient before he leaves the ER?



ANSWER : 1) Plaster of Paris / Fiberglass
2) Keep it Dry / Avoid Weight-Bearing

144. What is the diagnosis?

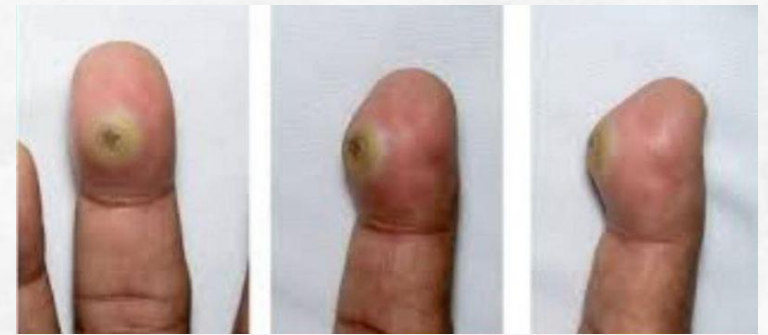


ANSWER : torus fracture (buckle fracture)

Orthopedic surgery

145. A 32-year-old man presents with severe pain, swelling, and redness of his fingertip (shown in the image). The pain is throbbing and worsens with pressure. On examination, the distal pulp of the finger is tense and tender.

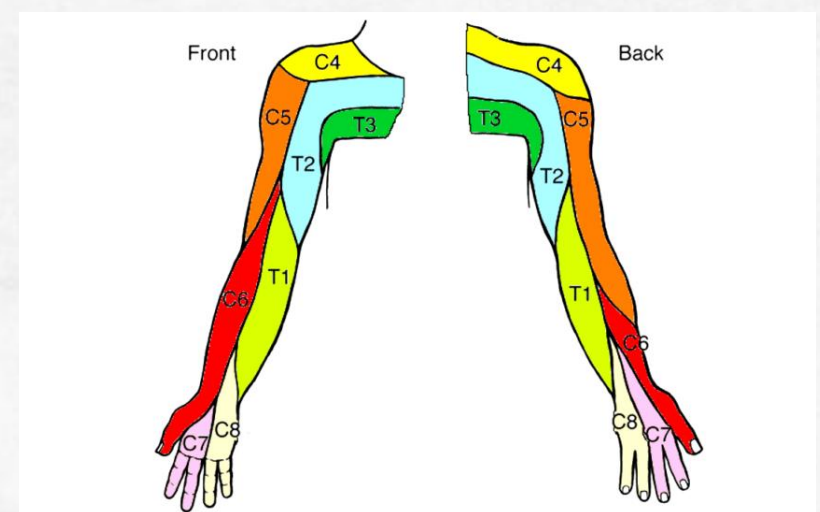
- 1) diagnosis?
- 2) complications if non treated.



ANSWER : 1) felon
2) osteomyelitis/necrosis of finger pad

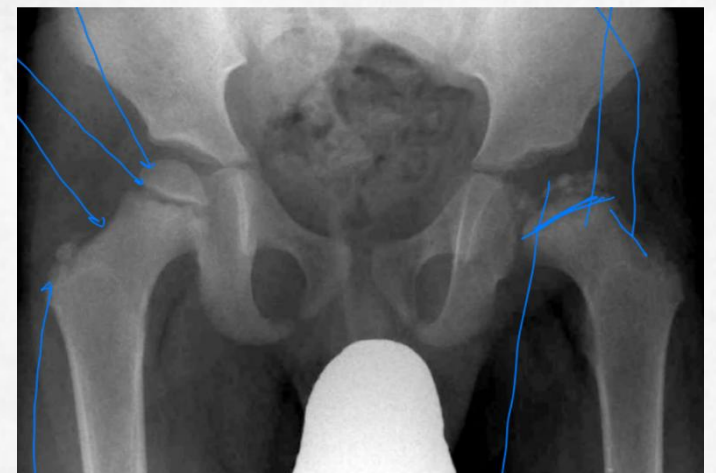
146. Name the labeled dermatomes.

- ANSWER :** 1) C6
2) C8
3) T1



147. This a pelvis X-ray for a 7 y/o boy with hip pain and limping of 5 months. He has a hx of sickle cell disease.

- 1) What is the diagnosis.
- 2) Mention 2 possible future complications.



ANSWER : 1) AVN on the left side
2) Premature degeneration (early osteoarthritis) / Trendelenburg gait

148.

- 1) Which tendon is tested by this exam?
- 2) What is the nerve supply to the tendon muscle?



ANSWER : 1) Flexor Digitorum Superficialis (FDS)
2) Median Nerve

Orthopedic surgery

149.

- 1) Name this deformity?
- 2) What is the most likely cause of this deformity?



ANSWER : 1) Cubitus Varus (gunstock deformity).
2) malunited supracondylar fracture of the humerus

150. A 7 y/o child presented by her mother for the posture shown in the picture.

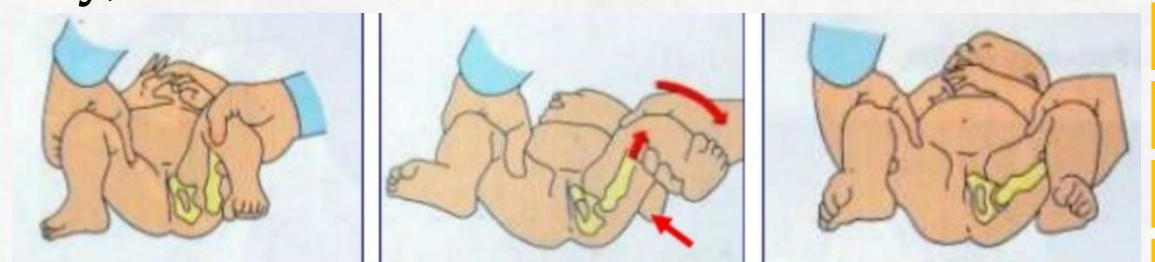
What is the name of the posture and the most cause?



ANSWER : W-sitting posture / Femoral Anteversion

151.

- 1) Name this physical examination test?
- 2) If the exam is positive in a 1-month-old baby, what is the diagnosis?
- 3) What is the next diagnostic step to confirm the diagnosis?



ANSWER : 1) Ortolani
2) DDH
3) US

152. The player in the picture developed a RIGHT knee injury during the game.

What is the most likely injured structure?

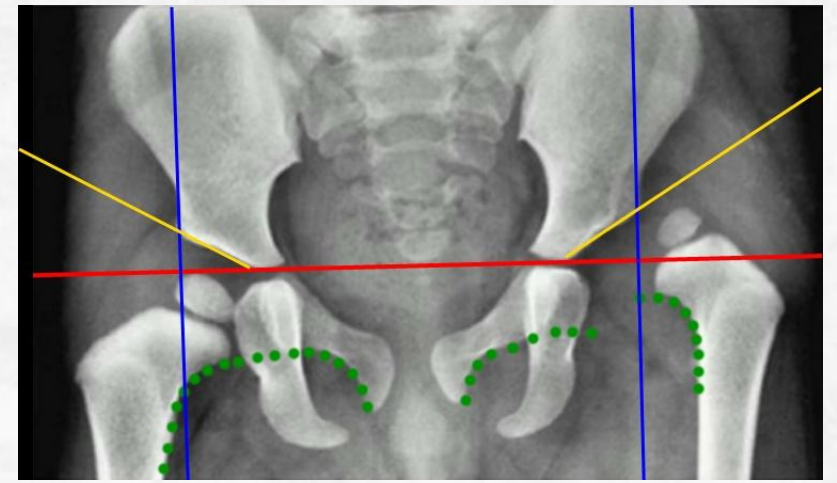


ANSWER : MCL

Orthopedic surgery

153. This is an Xray for a 4 month old child.

- 1) The Red line?
- 2) The Blue line?
- 3) If the angle marked is 35 on both sides what is the diagnosis and management?



ANSWER : 1) Hilgenreiner line
2) Perkin line
3) Bilateral Acetabular Dysplasia / Pavlik harness

154.

- 1) Name this deformity.
- 2) Mention one cause.



ANSWER : 1) Pes Cavus
2) neurological disorder (Charcot-Marie-Tooth (CMT) disease)

155. 21-year-old male patient presented to clinic as a case of chronic LBP of 2 years increased in the last 2 months.

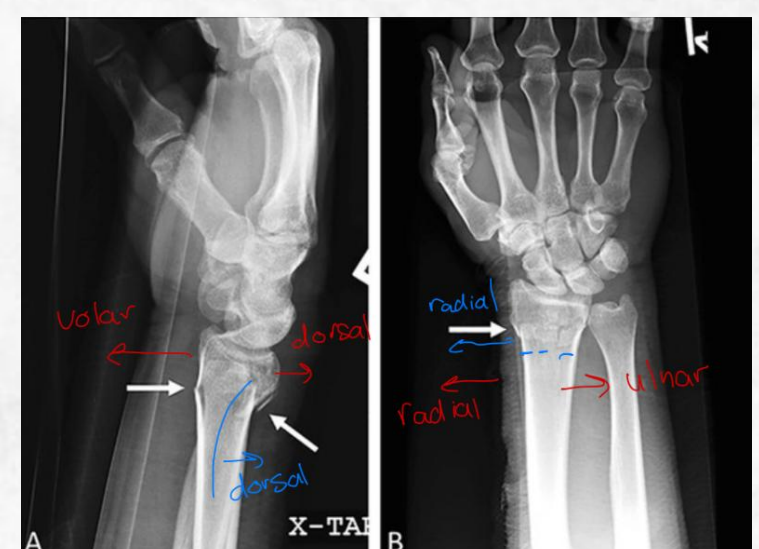
- 1) What is the diagnosis?
- 2) Which grade?
- 3) Mention 3 types.



ANSWER : 1) Spondylolisthesis
2) 2 (26% - 50%)
3) Dysplastic / Isthmic (MC) / Degenerative

156. 56 y/o female came to ER 2 hours after FD with severe pain in the RT wrist.

- 1) Give full description for this fracture.
- 2) What are the principles of management?



ANSWER : 1) Comminuted distal radius fracture (metaphyseal region) on the right side, without shortening.....
2) Reduction / Immobilization (Fixation) / Rehabilitation

Orthopedic surgery

157. Comparing orthopedic cast, which one is better in terms of: (Hand is A, Leg is B)

- 1) Weight?
- 2) Strength?
- 3) Molding ability?

ANSWER : 1) B more than A
2) A more than B
3) A more than B



158. A patient who was involved in a road traffic accident presented to the emergency department.

- 1) Grade?
- 2) What's the first step of management for this patient?
- 3) How would you manage the wound?



ANSWER : 1) 3 (Gustilo classification)

- 2) ATLS (ABCDE approach), Give warm IV fluids (namely Ringer's lactate) & stop the bleeding
- 3) Analgesia, antibiotics, anti-tetanus toxoid & adequate irrigation

159.

- 1) Name of This Device?
- 2) Mention 2 Complication Regarding this Device?

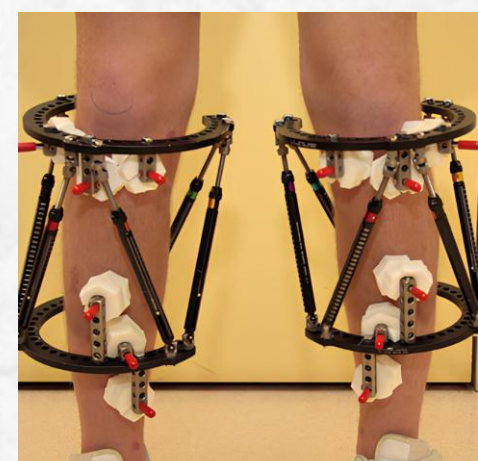


ANSWER : 1) Ilizarov External Fixator

- 2) Pin tract infection / Delayed or Failed Bone Healing

160.

- 1) Name of This Device?
- 2) Indications for Use?
- 3) Complication?



ANSWER : 1) Ilizarov Apparatus (or Ilizarov Frame/External Fixator)

- 2) Limb Lengthening
- 3) Pin tract infection / Delayed or Failed Bone Healing

Orthopedic surgery

161. A 72 years old osteoporotic lady complains of groin pain after she fell down

- 1) What is the diagnosis?
- 2) Other fractures that may affect this lady?



ANSWER : 1) transcervical femoral neck fracture
2) vertebral compression fracture, distal radius fracture (Colles fracture)

162. 56 yrs old lady presented with back pain that is relieved by flexion, her X ray is shown

- 1) What is your diagnosis?
- 2) Other investigations?



ANSWER : 1) Spinal stenosis
2) MRI / CT Scan

لا تنسوني من صالح دعائكم

Malek Abu Rahma

The End
Good Luck シ