



ESR-endorsed ESSR DIPLOMA  
Examination Session at ESSR 2015  
York, June 19, 2015

## WRITTEN TEST (40 MCQs)

1. In the Erdheim-Chester disease, which of the following statements is true:
  - a) it is a frequent disease in Western Europe
  - b) is a Langerhans cell histiocytosis
  - c) bone involvement is almost universal
  - d) it essentially affects the axial skeleton and only rarely the long bones
  
2. In the POEMS syndrome, which of the following statements is false:
  - a) affected patients are older than patients with standard multiple myeloma
  - b) sclerotic bone lesions are found in the majority of the patients
  - c) sclerotic bone lesions can be mistaken for bone islands
  - d) as a consequence of treatment response, sclerotic bone lesions may to decrease in size
  
- 3) Taking into account ankle sprains, the highest incidence of injury can be found in the:
  - a) calcaneofibular ligament
  - b) posterior talofibular ligament
  - c) anterior talofibular ligament
  - d) tibiocalcaneal ligament
  
- 4) HIV-positive patients have a higher incidence of:
  - a) bacillary angiomatosis
  - b) thoracic cage tuberculosis
  - c) reiter's syndrome
  - d) all of the previous entities
  
- 5) On MRI, the structures of the rotator cuff interval can be best evaluated on:
  - a) oblique sagittal and oblique coronal images
  - b) axial and oblique coronal images.
  - c) oblique sagittal and axial images
  - d) ABER position.
  
- 6) Which structure does not belong to the rotator cuff interval?
  - a) coraco-acromial ligament
  - b) long head of the biceps tendon
  - c) coracohumeral ligament
  - d) superior glenohumeral ligament

- 7) Most people under the age of 40 years who have anterior shoulder dislocation exhibits the following lesions (indicate the two most common)
- anteroinferior labrum lesion (Bankart lesion)
  - a reversed Hill-Sachs lesion
  - isolated tear of the anterior band of the inferior glenohumeral ligament
  - a Hill-Sachs lesion
- 8) The following finding about osteoid osteoma in the cortex of the long bones is true:
- periosteal reaction is a frequent finding
  - bone marrow edema on MRI is typically absent
  - after administration of gadolinium contrast, there is no contrast uptake
  - perilesional osteopenia on plain film is the rule
- 9) Which of the following features is not seen in PVNS of the hip?
- low signal intensity on T2-weighted images
  - blooming artifact on T2\* imaging
  - calcifications
  - joint erosions
- 10) Which peripheral nerve is most commonly involved in long bone fractures?
- median nerve
  - peroneal nerve
  - radial nerve
  - tibial nerve
- 11) Which answer is correct (two right answers)?
- insufficiency fractures in the foot are common
  - the course of the fracture line in insufficiency fractures runs perpendicular to the cortex
  - Osteochondral lesions are more common on the lateral than on the medial talar dome
  - T1-weighted sequences are the most important for evaluation of the stability of an osteochondral lesion
- 12) Which answer is correct?
- focal tendinopathy is characterized by low signal intensity on T2-weighted MR sequences
  - degeneration is predictive of partial or complete tendon rupture
  - tendinosis is never associated with paratendinitis
  - eccentric loading leads to an impairment of tendon function
- 13) Which tendon is most commonly affected in patients with rheumatoid arthritis?
- patellar tendon
  - tibialis posterior tendon
  - peroneus longus tendon
  - biceps tendon
- 14) Which tendon runs alongside the dorsal aspect of the medial malleolus?
- anterior tibial tendon
  - peroneus longus tendon
  - Achilles tendon
  - flexor digitorum longus tendon

- 15) The Achilles tendon gets mostly injured in weekend athletes. Where is the typical location of the lesion?
- a) mid-portion
  - b) calcaneal insertion
  - c) musculotendinous junction
  - d) flexor hallucis longus tendon
- 16) Anteromedial shoulder impingement is associated with
- a) subscapularis tendon degeneration and tear
  - b) injury of the long head of the biceps tendon
  - c) fracture of the humeral head
  - d) inferior glenohumeral ligament tear
- 17) Patients with posterior shoulder dislocation have
- a) Hill-Sachs lesion
  - b) SLAP lesion
  - c) biceps tendon rupture
  - d) reversed Hill-Sachs lesion
- 18) Which of the following tendons doesn't take part in the common extensor tendon origin?
- a) extensor carpi radialis brevis
  - b) extensor carpi radialis longus
  - c) extensor digitorum longus
  - d) extensor carpi ulnaris
- 19) The preferential diagnosis of highly destructive unilateral sacroiliitis is:
- a) ankylosing spondylitis
  - b) DISH
  - c) psoriasis
  - d) septic arthritis
- 20) Osteosclerosis is not a typical feature of:
- a) osteopetrosis
  - b) Camurati-Engelmann disease
  - c) dyschondrosteosis
  - d) melorheostosis
- 21) Which hip disorder is most frequent at the age of 12-15 years?
- a) Perthes disease
  - b) transient synovitis
  - c) Slipped Capital Femoral Epiphysis
  - d) Meyer dysplasia
- 22) Which hip impingement syndrome is most frequent in young athletes?
- a) Cam femoro-acetabular impingement
  - b) Pincer femoro-acetabular impingement
  - c) ischiofemoral impingement
  - d) mixed impingement

- 23) Cartilaginous tumors are not seen in?
- Ollier's disease
  - Maffucci's disease
  - Hereditary Multiple Exostosis Syndrome
  - Gardner's syndrome
- 24) What feature does not fit with axial spondyloarthritis?
- Romanus lesion
  - Andersson lesion
  - Dagger sign
  - Edgren-Vainio sign
- 25) Which of the following elbow lesions is most frequent?
- common extensor tendon origin degeneration
  - common flexor tendon origine degeneration
  - triceps tendinosis
  - distal biceps tendinosis
- 26) Which of the following disease does not involve the wrist?
- Köhler's disease
  - Preiser's disease
  - Kienbock's disease
  - Madelung 's disease
- 27) What is true about the extensor tendons of the wrist?
- they are dived into 7 compartments
  - the first compartment includes the abductor pollicis longus and the extensor pollicis longus tendons
  - the first compartment structures cross over the second compartment tendons at the distal forearm
  - The DeQuevain tendinopathy refers to tendinopathy of the second compartment tendons
- 28) What is true about the Achilles tendon?
- it is invested by a tenosynovial sheath
  - it derives from the coalescence of the tendon fibers of the two heads of the gastrocnemius and soleus muscles
  - tendinopathy and tears usually occur 10cm from the calcaneal insertion
  - it is never affected by the magic angle phenomenon on MR imaging
- 29) Concerning soft-tissue tumors:
- soft-tissue sarcomas are always poorly defined
  - fine needle aspiration is needed to establish the diagnosis
  - lipomas are always hyperechoic on ultrasound
  - the giant cell tumor of tendon sheath is a form of pigmented villonodular synovitis
- 30) Regarding the Morton neuroma, which of the following statements is incorrect
- it is invariably located anterior to the deep intermetatarsal ligament
  - it most frequently affects the III intermetatarsal space
  - it is often associated with a distended intermetatarsal bursa
  - none of the above
- 31) Which of the following statements are true regarding MRI and soft-tissue tumors?

- a) MRI is the best method for local staging of soft tissue tumors
- b) well-circumscribes soft-tissue lesions on MRI are benign
- c) post-operative enhancement indicates a recurrence
- d) lesions with a high signal intensity on water sensitive sequences are cystic

32) Regarding rheumatoid arthritis. Which of the following statements is correct?

- a) typical location of rheumatoid arthritis are the MCP- and DIP-joints of the hands
- b) the inflammatory synovial proliferation in rheumatoid arthritis is called pannus
- c) a sausage finger is a typical feature of rheumatoid arthritis
- d) bone erosions are initially central

33) Osteomyelitis versus Charcot neuro-osteoarthropathy. Which of the following statements is correct?

- a) an intact skin favours osteomyelitis
- b) fragmentation of bones is only seen in Charcot
- c) rocker-bottom deformity can occur in chronic Charcot
- d) diabetes is considered a risk factor for the occurrence of osteomyelitis but not for Charcot

34) Which of the following joints is typically not involved in haemophilic arthropathy?

- a) elbow
- b) wrist
- c) knee
- d) ankle

35) Regarding the rotator cuff interval, which of the following statements is incorrect?

- a) if the coracohumeral ligament is intact, there is no biceps tendon dislocation
- b) rotator cuff interval abnormalities may be observed in adhesive capsulitis
- c) an isolated rupture of the lateral band of the coracohumeral ligament causes subluxation of the biceps superficial to the subscapularis tendon
- d) the coracohumeral ligament cannot rupture in association with anterior tears of the supraspinatus

36) Which of the following nerves sends motor fibers to the thenar eminence muscles?

- a) ulnar nerve
- b) radial nerve
- c) median nerve
- d) medial antebrachial cutaneous nerve

37) In the fingers, which annular pulley is typically involved in the condition referred to as the "trigger finger"?

- a) A1
- b) A2
- c) A3
- d) A4

38) Which tendon may be secondarily affected in case of triscaphe joint arthritis?

- a) flexor pollicis longus
- b) flexor carpi radialis
- c) extensor carpi radialis brevis
- d) none of the previous

39) The giant cell tumor of the tendon sheaths typically shows:

- a) circumferential growth in the fingers
- b) associated bone erosions
- c) low signal intensity on T2-weighted sequences
- d) all of the above features

40) Which of the following accessory muscles may cause carpal tunnel syndrome?

- a) chondroepitrochlearis
- b) abductor digiti minimi
- c) reversed palmaris
- d) none of the above



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