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 decrease in size

3) Taking into account ankle sprains, the highest incidence of injury can be found in:
   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 exhibit the following lesions (indicate the two most common)
   a) anteroinferior labrum lesion (Bankart lesion)
   b) a reversed Hill-Sachs lesion
   c) isolated tear of the anterior band of the inferior glenohumeral ligament
   d) a Hill-Sachs lesion

8) The following finding about osteoid osteoma in the cortex of the long bones is true:
   a) periostal reaction is a frequent finding
   b) bone marrow edema on MRI is typically absent
   c) after administration of gadolinium contrast, there is no contrast uptake
   d) perilesional osteopenia on plain film is the rule

9) Which of the following features is not seen in PVNS of the hip?
   a) low signal intensity on T2-weighted images
   b) blooming artifact on T2* imaging
   c) calcifications
   d) joint erosions

10) Which peripheral nerve is most commonly involved in long bone fractures?
    a) median nerve
    b) peroneal nerve
    c) radial nerve
    d) tibial nerve

11) Which answer is correct (two right answers)?
    a) insufficiency fractures in the foot are common
    b) the course of the fracture line in insufficiency fractures runs perpendicular to the cortex
    c) Osteochondral lesions are more common on the lateral than on the medial talar dome
    d) T1-weighted sequences are the most important for evaluation of the stability of an osteochondral lesion

12) Which answer is correct?
    a) focal tendinopathy is characterized by low signal intensity on T2-weighted MR sequences
    b) degeneration is predictive of partial or complete tendon rupture
    c) tendinosis is never associated with paratendinitis
    d) eccentric loading leads to an impairment of tendon function

13) Which tendon is most commonly affected in patients with rheumatoid arthritis?
    a) patellar tendon
    b) tibialis posterior tendon
    c) peroneus longus tendon
    d) biceps tendon

14) Which tendon runs alongside the dorsal aspect of the medial malleolus?
    a) anterior tibial tendon
    b) peroneus longus tendon
    c) Achilles tendon
    d) 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) calcanear 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?
   a) Ollier’s disease
   b) Mafucci’s disease
   c) Hereditary Multiple Exostosis Syndrome
   d) Gardner’s syndrome

24) What feature does not fit with axial spondyloarthropathy?
   a) Romanus lesion
   b) Andersson lesion
   c) Dagger sign
   d) Edgren-Vaino sign

25) Which of the following elbow lesions is most frequent?
   a) common extensor tendon origin degeneration
   b) common flexor tendon origin degeneration
   c) triceps tendinosis
   d) distal biceps tendinosis

26) Which of the following disease does not involve the wrist?
   a) Köhler’s disease
   b) Preiser’s disease
   c) Kienbock’s disease
   d) Madelung ’s disease

27) What is true about the extensor tendons of the wrist?
   a) they are dived into 7 compartments
   b) the first compartment includes the abductor pollicis longus and the extensor pollicis longus tendons
   c) the first compartment structures cross over the second compartment tendons at the distal forearm
   d) The DeQuevain tendinopathy refers to tendinopathy of the second compartment tendons

28) What is true about the Achilles tendon?
   a) it is invested by a tenosynovial sheath
   b) it derives from the coalescence of the tendon fibers of the two heads of the gastrocnemius and soleus muscles
   c) tendinopathy and tears usually occur 10cm from the calcaneal insertion
   d) it is never affected by the magic angle phenomenon on MR imaging

29) Concerning soft-tissue tumors:
   a) soft-tissue sarcomas are always poorly defined
   b) fine needle aspiration is needed to establish the diagnosis
   c) lipomas are always hyperechoic on ultrasound
   d) 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
   a) it is invariably located anterior to the deep intermetatarsal ligament
   b) it most frequently affects the III intermetatarsal space
   c) it is often associated with a distended intermetatarsal bursa
   d) 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 ward 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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