





Kurdistan Regional Government  
Ministry of Health  
Duhok Directorate General of Health  
Department of Planning  
Division of Planning of Human Resources for Health

نافی چار قوولی:

**Knowledge Competency Test for Acceptance in Senior Residency Program in Rheumatology**

**Date: August 28, 2016**

**Exam Time: 90 minutes**

**General Instructions:**

- Select the most appropriate answer for each question.
- Write your full names on all pages.
- All questions need to be answered.
- A wrong answer does not cancel out a correct answer.
- Passing this test is a pre-requisite for entering the second stage of competition of acceptance in senior residency program.

**1) Which of the following represents the most potent risk factor for the development of osteoarthritis?**

- a) Age
- b) Gender
- c) Genetic susceptibility
- d) Obesity

**2) All of the following statements are true of NSAIDs in general, EXCEPT**

- a) They have no major effect on the underlying disease process.
- b) They tend to cause gastric irritation and exacerbate peptic ulcers.
- c) They may suppress vasodilatory functions of renal prostaglandins.
- d) They may increase the pain threshold .
- e) Most are readily absorbed after oral administration.

**3) Presentation with acute monoarthritis suggests the possibility of these conditions EXCEPT:**

- a) Crystal arthritis
- b) Trauma
- c) Bacterial infection
- d) Rheumatoid arthritis
- e) Enteropathic arthritis





- 4) **All are true concerning lumbosacral spine films EXCEPT:**
- a) Focal or generalized reduction in bone density may be observed in myeloma.
  - b) Progression of vertebral body osteomyelitis may lead to involvement of two adjacent vertebrae and the intervening disk space.
  - c) Metastatic neoplasms to the vertebral bodies characteristically invade the intervening disk space.
  - d) Alternate bands of osteosclerosis and resorption may be seen in renal osteodystrophy.
- 5) **A 25-year-old man presents with back pain. Which one of the following may suggest a diagnosis of ankylosing spondylitis**
- e) Rapid onset
  - f) Gets worse following exercise
  - g) Bone tenderness
  - h) Pain at night
  - i) Improves with rest
- 6) **Each of the following is a potential side effect of weekly low-dose (5-15 mg) methotrexate used to treat rheumatoid arthritis EXCEPT:**
- a) Leukopenia
  - b) Alopecia
  - c) Nephropathy
  - d) Stomatitis
  - e) Thrombocytopenia
- 7) **Which of the following statements regarding the vasculitis syndromes is TRUE?**
- a) Wegner's granulomatosis is characterized by infiltration of various organs and vessels with cellular infiltrates consisting of atypical lymphoid and plasmacytoid cells.
  - b) Hypersensitivity vasculitis is mostly confined to the skin.
  - c) Temporal arteritis usually involves small intracranial arterioles and venules.
  - d) Henoch-Schönlein purpura is usually progressive, leading to death or renal failure without appropriate therapeutic intervention.
- 8) **All the following organisms have been implicated in reactive arthritis EXCEPT**
- a) Chlamydia trachomatis
  - b) Neisseria gonorrhoeae
  - c) Salmonella enteritidis
  - d) Shigella dysenteriae
  - e) Yersinia enterocolitica





- 9) A 33-year-old female presents with pain at the elbow which she has been aware of for the last 2 weeks. Which of the following would be consistent with a diagnosis of tennis elbow?
- a) Pain on pressure over the medial epicondyle
  - b) Pain on wrist extension against resistance
  - c) Pain on pronation of the forearm
  - d) Pain on flexion of the fingers against resistance
- 10) A 40 year-old woman presents with a year history of Raynaud's phenomenon, dyspepsia and arthralgias. On examination she has sclerodactyly and synovitis of the small joints of the hands. Her ESR is 40 mm/hr (<10) but Rheumatoid factor and Antinuclear Antibody are both negative. Which one of the following is most likely to develop as a further complication of this disorder?
- a) Anterior uveitis
  - b) Butterfly rash
  - c) Erosive joint disease
  - d) Oral ulcerations
- 11) Which of the following drugs is most likely to cause systemic lupus-like syndrome?
- a) Isoniazid
  - b) Methotrexate
  - c) Procainamide
  - d) Sulfasalazine
- 12) A 69-year-old woman taking hydralazine for hypertension presents with joint pain and chest pain. On cardiac examination, the patient has a pericardial rub. What is the diagnosis?
- a) Dermatomyositis
  - b) SLE
  - c) Polymyalgia rheumatic
  - d) Felty syndrome





- 13) A 45-year-old woman notices that she develops tingling and numbness over the palmar surface of her thumb, index, and middle fingers after several hours at her computer workstation doing word processing. Pain in the same area often occurs at night as well. Which of the following pathologic findings accounts for her symptoms?
- a) Gout
  - b) Localised tenosynovitis
  - c) Rheumatoid arthritis
  - d) Toxic peripheral neuropathy
- 14) A 45 year old male attends for an insurance medical and is in good health. Examination was normal but investigations reveal that he has a serum urate concentration of 0.55 mmol/l (NR 0.25-0.45). Which of the following is the most appropriate management for this patient?
- a) Lifestyle advice
  - b) Start allopurinol
  - c) Start colchicine
  - d) Start diclofenac
  - e) Start prednisolone
- 15) A 50 year old woman presents with dry eyes, a dry mouth, an erythematous rash and polyarthralgia. Investigations: ANA strongly positive (1:1600), anti-Ro/SSA antibodies strongly positive, rheumatoid factor positive, IgG markedly elevated at 45 g/l (normal - <15 g/l). What is the most likely diagnosis?
- a) Hyperviscosity syndrome
  - b) Myeloma associated vasculitis
  - c) Primary Sjogren's Syndrome
  - d) Systemic Lupus Erythematosus
- 16) An 85 year old woman presented with bilateral osteoarthritis of the knees. She had no history of previous gastrointestinal disease. Which of the following is the most appropriate initial treatment for her?
- a) Celecoxib
  - b) Naproxen
  - c) Dihydrocodeine
  - d) Paracetamol





- 17) A 78 year old man presents with an acute onset of severe pain and swelling of the left wrist which had developed since she had a chest infection two weeks previously. On examination, he had a temperature of 38.8 °C and the left wrist was red, swollen and painful. What is the most appropriate initial investigation?
- a) Erythrocyte sedimentation rate
  - b) Full blood count
  - c) Joint aspiration
  - d) Serum urate concentration
  - e) X-ray of the joint
- 18) A 24-year-old male has been receiving sulphasalazine for 6 months as treatment for Reiters disease. His most recent series of blood tests were normal. When should he next be screened?
- a) Two weeks
  - b) Three months
  - c) Six months
  - d) One year
- 19) A 50-year-old female presented with a week's history of pain and stiffness in her shoulders and wrists with symptomatic deterioration in the morning (morning stiffness). On examination, there was synovitis of both wrists and there was no proximal muscle wasting or weakness. Her ESR was 50 mm/hr (0 - 20). What is the most likely diagnosis?
- a) Polymyalgia rheumatica
  - b) Polymyositis
  - c) Reactive arthritis
  - d) Rheumatoid arthritis
- 20) A 68-year-old woman complained of pain at the base of her right thumb. There was tenderness and swelling of the right first carpo-metacarpal joint. What is the most likely diagnosis?
- a) Avascular necrosis of the scaphoid
  - b) Osteoarthritis
  - c) Psoriatic arthritis
  - d) Rheumatoid arthritis





- 21) A 52-year-old female with type 2 diabetes presents with a two month history of painful hands and feet. Investigations confirm a diagnosis of sero-positive erosive rheumatoid arthritis. Which of the following DMARDS would be most appropriate initial treatment of her early Rheumatoid Arthritis?
- a) Methotrexate
  - b) Hydroxychloroquine
  - c) IM Gold
  - d) Etanercept
- 22) In systemic lupus erythematosus, which of the following organ system complications is most likely to occur over the course of disease?
- a) Cardiopulmonary
  - b) Cutaneous
  - c) Hematologic
  - d) Musculoskeletal
- 23) Which of the following is the most frequent site of joint involvement in established rheumatoid arthritis (RA)?
- a) Distal interphalangeal joint
  - b) Wrist
  - c) Knee
  - d) Hip
- 24) Which of the following definitions best fits the term enthesitis?
- a) Alteration of joint alignment so that articulating surfaces incompletely approximate each other
  - b) Inflammation at the site of tendinous or ligamentous insertion into bone
  - c) Inflammation of a saclike cavity near a joint that decreases friction
  - d) A palpable vibratory or crackling sensation elicited with joint motion
- 25) A 40-year-old woman complains of a permanent 'funny-bone' sensation in her right elbow. This is accompanied by tingling in the little and ring finger. Her symptoms are worse when the elbow is bent for prolonged periods. What is the most likely diagnosis?
- a) Cubital tunnel syndrome
  - b) Lateral epicondylitis
  - c) Medial epicondylitis
  - d) Median nerve entrapment syndrome





- 26) The following diseases are associated with antinuclear (ANA) and/or rheumatoid factor (RF) antibodies EXCEPT:
- a) Infective endocarditis
  - b) Sjögren's syndrome
  - c) Rheumatoid arthritis
  - d) Ankylosing spondylitis
- 27) Presentation with acute monoarthritis suggests the possibility of the following EXCEPT:
- a) Crystal arthritis
  - b) Trauma
  - c) Rheumatoid arthritis
  - d) Bacterial infection
- 28) In a patient with mechanical neck pain the following are true EXCEPT:
- a) Aggravation by sneezing
  - b) Radiation to the occiput
  - c) Associated fever and neck stiffness
  - d) Associated arm radiation
- 29) Typical features of seronegative spondyloarthritis include the following EXCEPT:
- a) Asymmetrical oligoarthritis
  - b) Involvement of cartilaginous joints
  - c) Positive rheumatoid factor
  - d) Enthesitis of tendinous insertions
- 30) The following statements concerning osteoporosis are true EXCEPT:
- a) Bone mineral and matrix formation rates are always greater than resorption rates.
  - b) Bone density in postmenopausal women is the most important determinant for hip and vertebral fractures.
  - c) Dual-energy x-ray absorptiometry is the most accurate method for assessing bone density.
  - d) Prevention of symptomatic osteoporosis should be a top public health goal in the United States.
- 31) The following statements concerning lumbosacral spine films are true EXCEPT:
- a) Focal or generalized reduction in bone density may be observed in myeloma.
  - b) Progression of vertebral body osteomyelitis may lead to involvement of two adjacent vertebrae and the intervening disk space.
  - c) Metastatic neoplasms to the vertebral bodies characteristically invade the intervening disk space.
  - d) Alternate bands of osteosclerosis and resorption may be seen in renal osteodystrophy.





**32) Arthritis is associated with the following systemic diseases EXCEPT:**

- a) Whipple's disease
- b) Wilson's disease
- c) Primary biliary cirrhosis
- d) Behcet's disease
- e) Myocardial infarction

**33) Regarding Systemic sclerosis all are true EXCEPT:**

- a) Is more frequent in males
- b) Is associated with fibrinoid necrosis in the kidney
- c) Is associated with reduced pulmonary gas transfer
- d) Is associated with radiological oesophageal abnormality in more than 50% of cases

**34) An attack of gout may occur as a result of**

- a) Obstructive jaundice
- b) Diuretic therapy for chronic cardiac failure
- c) Long term corticosteroid therapy for asthma
- d) Familial hypercholesterolaemia

**35) Complications of Behçet's syndrome include the following EXCEPT:**

- a) Thrombophlebitis
- b) Ulcerative colitis
- c) Retrobulbar neuritis
- d) Hyperuricaemia

**36) Heliotropic rash is a feature of:**

- a) Polymyositis
- b) SLE
- c) Mixed connective tissue disease
- d) Sjogren's disease
- e) Dermatomyositis

**37) Indications for urate lowering drugs include the following EXCEPT:**

- a) Recurrent attacks of acute gout
- b) Tophi
- c) Evidence of bone or joint damage
- d) Associated renal disease
- e) Acute gout with moderately elevated serum uric acid





- 38) Which of the following is not a criterion for classification of SLE?
- a) Alopecia
  - b) Malar rash
  - c) Serositis
  - d) Psychosis
  - e) Oral ulcers
- 39) The following are regarded as disease modifying antirheumatic drugs EXCEPT:
- a) Methotrexate
  - b) Lefunomide
  - c) Infliximab
  - d) Anakinra
  - e) Prednisolone
- 40) In polymyositis the first drug of choice is:
- a) Methotrexate
  - b) Prednisolone
  - c) Cyclosporine
  - d) Cyclophosphamide
  - e) Tacrolimus
- 41) All of the following are regarded small vessel vasculitis EXCEPT:
- a) Wegner's granulomatosis
  - b) Churg-Struass syndrome
  - c) Takayasu's arteritis
  - d) Henoch-Schonlein purpura
  - e) Cryoglobulinemia
- 42) All of the following are musculoskeletal complications of steroid EXCEPT:
- a) Osteonecrosis
  - b) Osteoporosis
  - c) Myopathy
  - d) Drug induced lupus
  - e) Myalgias
- 43) HLA B27 is positive in 90% of:
- a) Ankylosing spondylitis
  - b) Behcet disease
  - c) Rheumatoid arthritis
  - d) Reiter's disease
  - e) Psoriatic arthritis





**44) Axial arthritis in ankylosing spondylitis is best treated by:**

- a) NSAIDs
- b) Anti-TNF agents
- c) Methotrexate
- d) Prednisolone
- e) Sulfasalazine

**45) Which of the following is not regarded Anti-TNF biologic agent:**

- a) Infliximab
- b) Adalimumab
- c) Rituximab
- d) Etanercept

**46) Hypertensive renal crisis is one of the main causes of death in:**

- a) SLE
- b) Rheumatoid arthritis
- c) Polymyositis
- d) Systemic sclerosis
- e) Giant cell arteritis

**47) Rheumatological conditions associated with HIV include the following EXCEPT:**

- a) Rheumatoid arthritis
- b) Reactive arthritis
- c) Psoriatic arthritis
- d) Myositis
- e) Vasculitis

**48) Which of the following NSAID is associated with lowest GIT complications:**

- a) Ibuprofen
- b) Etodolac
- c) Naproxen
- d) Piroxicam
- e) Etoricoxib

**49) All the following are potential side effects of infliximab EXCEPT:**

- a) Pulmonary fibrosis
- b) Disseminated tuberculosis
- c) Exacerbation of congestive heart failure
- d) Pancytopenia





50) In scleroderma, all of the followings are true EXCEPT:

- a) The etiology is still unknown.
- b) Erosive arthropathy is very common.
- c) Restricted hand movement is mainly due to skin disease rather than joint disease.
- d) Pulmonary involvement is the major cause of morbidity and mortality.

