Doctor 021



MSS PATHOLOGY PAST PAPERS (17-20)

INCLUDING MAKEUP EXAMS

WRITER: Rababa'h CORRECTOR: Firas

- 1- A man came to the clinic with left knee pain, the arthroscopic picture showed finger like projection into the joint with brown pigment. Best disorder describes his condition?
 - A. Pigmented villonodular synovitis (PVNS)
 - B. Rheumatoid arthritis
 - C. Degenerative joint disease
 - D. Lyme disease

Answer: A

- 2- A 60-year-old man came to the emergency and complained of pain in his joints. He denied that he had been exposed to such situations before, and when he was examined, it was found that the presence of positive birefringence, Imagine yourself in the place of the emergency doctor. What is the best diagnosis you can give?
 - A. Acute gout arthritis
 - B. Acute pseudogout
 - C. Rheumatoid arthritis
 - D. Osteoarthritis

Answer: B

- 3- In contrast to lipomas, liposarcomas are?
 - A. Larger masses, commonly in the thigh and retroperitoneum
 - B. Treated mainly by chemotherapy alone.
 - C. The most common soft tissue tumors
 - D. Usually smaller in size
 - E. Devoid of any specific genetic or molecular abnormalities

Answer: A

- 4- Rhomboid-geometric crystals were seen on joint aspirate from a 60-yearold male patient who came with right ankle joint pain and swelling. The crystals exhibit weakly positive birefringence under polarizing microscope. What is the diagnosis? (2019)
 - A. Pseudogout
 - B. Sero-negative arthropathy of ankle joint
 - C. Acute gouty arthritis
 - D. Acute exacerbation of osteoarthritis
 - E. Chronic gouty arthritis

Answer: A

- 5- A 65-year-old woman presents with multiple hand joint pain and swelling. She complains of morning joint stiffness that improves slowly after initial movements. Bilateral ulnar deviation was noted on examination. Which one of the following tests will confirm your top differential diagnosis?
 - A. Arthroscopic examination
 - B. Rheumatoid factor
 - C. High resolution X-ray of the hands and the feet
 - D. Joint fine needle aspiration fluid examination
 - E. No need for further testing; the patient has ankylosing spondylitis.

Answer: B

- 6- Fibromatoses diseases are best characterized by:
 - A. Easy surgical excision with low recurrence rate
 - B. Fibroblast growth factor receptor 3 mutations
 - C. Locally destructive and infiltrative lesions
 - D. Highly pleomorphic cells under the microscope
 - E. Almost all are superficial subcutaneous lesions.

Answer: C

- 7- Which one of the following statements best characterizes degenerative joint disease of bone?
 - A. Insidious and increase with age.
 - B. Avascular necrosis is a common complication of severe cases.
 - C. Pannus formation is characteristic.
 - D. Primary disease of the synovium
 - E. Secondary etiology is more common than idiopathic/primary.

Answer: A

- 8- A 50-year-old woman presents with bilateral hands joint pain with morning stiffness. The pain decreases after a couple of hours of daily activities. The small joints of the hand are swollen, tender and warm. Ulnar deviation and swan-neck deformity are noted on examination. Which one of the following statements best describes this condition?
 An associated sacroiliitie is usually present in 95% of the cases
 - A. An associated sacroiliitis is usually present in 95% of the cases.
 - B. Most cases are mild and are relieved by NSAIDs.C. Diagnosis needs CT scan imaging confirmation.
 - D. Chronic non-suppurative autoimmune synovitis
 - E. Reactive degenerative arthritis

Answer: D

- 9- You are evaluating a 65-year-old female patient who came with right hip joint pain. The Rheumatoid factor is negative. No other joints are affected, and the patient recalled recent eye disease requiring frequent ophthalmological evaluation. No skin manifestation or urinary abnormalities noted. Bone MRI revealed right sacroiliac joint fusion. Serum HLA typing was positive for HLA B-27. What is your best diagnosis?
 - A. Sero-negative rheumatoid arthritis
 - B. Ankylosing spondylitis
 - C. Psoriatic arthritis
 - D. Mono-ostotic osteoarthritis
 - E. Reiter syndrome

Answer:B

- 10- You are an intern in the emergency room on Thursday night. A 12-yearold male patient comes with sudden pain in his right knee and was limping when you saw him. His right knee is swollen, red and feels hot on touch. He has fever and his white blood count is 19,000/ mL with increased neutrophils. What would be your best action?
 - A. Treat as acute gouty arthritis, aspirate to check for crystals.
 - B. Consider juvenile idiopathic arthritis, and order rheumatoid factor test.
 - C. Consider acute septic arthritis; plan admission and consult pediatrics and orthopedics on call.
 - D. Considering lower femur fracture, he only needs casting and pain medications.
 - E. Treat as a case of lower femur greenstick fracture

Answer: C

- 11- A 65-year-old female patient came with chronic progressive bilateral knee and ankle joint pain. While evaluating her knee X rays, you noticed narrowing of joint spaces, eburnation of articular cartilage, subchondral cystic formation and occasional osteophytes in the joint cavity. What is the most likely diagnosis?
 - A. Reiter syndrome
 - B. Seropositive rheumatoid arthritis
 - C. Ankylosing spondylitis with fusion of joints
 - D. Seronegative sacroiliitis and ulnar deviation
 - E. Advanced degree of osteoarthritis/ degenerative joint disease.

Answer: E

- 12- You received a large soft tissue mass from the retroperitoneum for a 71-year-old male patient. The mass measures 20x18x15 came with ill-defined borders. Sectioning through the mass showed hemorrhage and necrosis. Which one of the following features would be most likely?
 - A. Bland smooth muscles proliferation with low mitotic count
 - B. Anaplastic cells with increased mitosis
 - C. Benign neoplasm but with frequent local recurrence
 - D. Low grade malignancy with good prognosis
 - E. The presence of central cyst formation

Answer: B

- 13-Morning stiffness that worsens with walking, diminished joint space and presence of osteophytes describes:
 - A. Osteosarcoma
 - B. Rheumatoid arthritis
 - C. Paget disease
 - D. Degeneration of articular cartilage

Answer: D

- 14-You are evaluating a possible smooth muscle tumor from the uterus for a 55-year-old female patient. Which one of the following features would raise the possibility of a malignant diagnosis (leiomyosarcoma) rather than benign leiomyoma (fibroid)?
 - A. Increased mitosis and necrosis
 - B. Red and hyaline degeneration
 - C. Large size (> than 10 cm)
 - D. Lobulated white cut surface
 - E. The presence of central cyst formation

Answer: A

- 15- Fibromatosis causes death by:
 - A. Destruction of distant sites through metastasis
 - B. Infiltration and local destruction
 - C. Malignant proliferation of fibroblasts
 - D. Benign proliferation with no recurrence

Answer: B

16- Severe form of osteoarthritis (Degenerative Joint Disease) is characterized by?

- A. Seronegative sacroiliitis and ulnar deviation
- B. Ankylosing spondylitis with fusion of joints
- C. Frequent vertebral compression fractures
- D. Greenstick fractures of long bones and pannus formations
- E. Osteophytes, narrowing of joint space, eburnation of the articular cartilage and subchondral cyst formation.

Answer: E

- 17- Pseudogout of the joint characterized by?
 - A. Only acute attacks of joint pain and swelling.
 - B. Deposition of negative birefringent needle shaped crystals
 - C. Ulnar deviation and swan neck deformity in most cases
 - D. Leukocytosis and febrile illness in affected patients
 - E. Geometric and rhomboid crystals in joint space

Answer: E

- 18- Which of the following statements best describes synovial sarcoma?
 - A. Highly anaplastic sarcoma with frequent lung metastasis
 - B. Only found around the synovial joints
 - C. Optimum treatment is by appropriate chemotherapy.
 - D. Translocation (X;18) (p11; q11) is a characteristic finding.
 - E. Biphasic benign tumor

Answer: D

- 19- You are evaluating a possible smooth muscle tumor from the uterus for a 55-year-old female patient. Which one of the following features would raise the possibility of a malignant diagnosis (leiomyosarcoma) rather than benign leiomyoma (fibroid)?
 - F. Increased mitosis and necrosis
 - G. Red and hyaline degeneration
 - H. Large size (> than 10 cm)
 - I. Lobulated white cut surface
 - J. The presence of central cyst formation

Answer: A

- 20- A 45-year-old man came to your clinic with severe big toe pain and swelling. No history of trauma was mentioned. Aspiration of the big toe interphalangeal joint revealed needle shaped crystals with negative birefringence. The most likely diagnosis is:
 - A. Osteoarthritis
 - B. Acute Gouty arthritis
 - C. Sero-negative Reiter disease
 - D. Rheumatoid arthritis
 - E. Pseudogout arthritis

Answer: B

- 21- Needle shaped negative birefringent is diagnostic of:
 - A. Suppurative arthritis
 - B. Rheumatoid arthritis
 - C. Pseudogout
 - D. Gouty arthritis

Answer: D

- 22- Which of the following is wrong regarding rheumatoid arthritis?
 - A. TNF is the major mediator in pathogenesis.
 - B. Distal interphalangeal joints are most affected.
 - C. It is a chronic inflammatory auto-immune disease.
 - D. Up to 80% of patients are seropositive for antibodies that attack selfantibodies

Answer: B

- 23- A 76-year-old male patient came with severe acute hip pain. Pelvic Xray revealed a pathologic fracture at the neck of femur with multiple osteoblastic lesions of all pelvic bones and vertebrae. What would be the most cost-effective test to confirm the diagnosis?
 - A. Open reduction and tissue biopsy
 - B. Grade V degenerative joint disease changes
 - C. Rheumatoid arthritis
 - D. CT scan of abdomen and pelvis
 - E. Serum prostate specific antibody (PSA) level

Answer: E

24-which of the following is not true about gouty arthritis:

- A. tophi are found only in joints.
- B. tophi in the articular cartilage

Answer: A

25- A 54-year-old man came to the emergency and complained of pain and warm in his joints, when he was examined, it was found that there were traces of corrosion in the cartilage in the bone of the femur Which of the following is the best describe?

Answer: subchondral cyst

26- Which of the following is true regarding rheumatoid arthritis?

Answer: true non suppurative autoimmune synovitis

27-Which of the following is the best description for giant cell tumor?

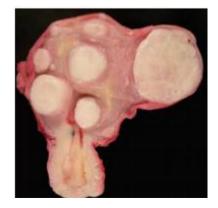
Answer: Osteoclast-like giant cells

PRACTICAL

- 1- The following picture represents:
 - A. Benign most common soft tissue tumor
 - B. Malignant soft tissue tumor
 - C. Nodular fasciitis
 - D. Fibromatoses



- 2- This section is best described as:
 - A. Benign tumor of smooth muscle
 - B. Leiomyosarcoma
 - C. The most common soft tissue tumor
 - D. The malignant prototype of skeletal muscles tumors



- 3- The images below belong to an 11- year-old boy who came with precocious puberty and multiple endocrine glands abnormalities. What
 - is the most likely diagnosis?
 - A. Leontiasis ossea / platybasia
 - B. McCune-Albright syndrome
 - C. Multiple hereditary chondromatosis
 - D. Familial Paget disease of bone
 - E. Mazabraud syndrome



- 4- You are evaluating a 45-year-old woman with upper leg pain. The X- ray and the open biopsy material are shown below. This disease is best
 - characterized by? A. Association of Paget disease of
 - bone B. Tumor cells lack RNANKL protein.
 - C. Cure is achieved by disarticulation from the knee joint.
 - D. Locally aggressive neoplasm of adults
 - E. High frequency of metastasis.
- 5- The best description of the following case is:



Answer: The forming cells are typical adipocytes

Answers:

1) A 2) A 3) B 4) D

Good Luck !

