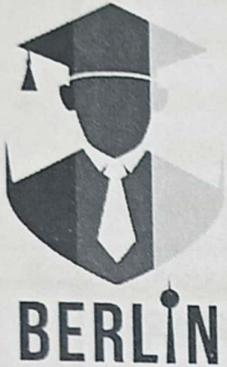


Level-1 Semester-2

# Pathology - MSS



*MCQ Lecture 5*  
**BONE TUMORS**

**DR M. YUSUF**



## MCQ on Bone Tumors

<p>1. <u>A patient with multiple osteomas. This is a part of:-</u></p> <ul style="list-style-type: none"><li>a) Gardner syndrome</li><li>b) Ollier disease</li><li>c) Maffucci syndrome</li><li>d) Li-Fraumeni syndrome</li><li>e) McCune Albright syndrome</li></ul>	A
<p>2. <u>Ollier disease is characterized by multiple:-</u></p> <ul style="list-style-type: none"><li>a) Exostosis</li><li>b) Fibrous dysplasia</li><li>c) Chondromas</li><li>d) Bone secondaries</li><li>e) Osteomas</li></ul>	C
<p>3. <u>Patient with Paget's disease of bone is vulnerable to the development of:-</u></p> <ul style="list-style-type: none"><li>a) Osteomyelitis</li><li>b) Osteoblastoma</li><li>c) Fibrous dysplasia</li><li>d) Osteosarcoma</li><li>e) Ewing sarcoma</li></ul>	D
<p>4. <u>The following bone disease may predispose to osteosarcoma:-</u></p> <ul style="list-style-type: none"><li>a) Osteoporosis</li><li>b) Rickets</li><li>c) Osteomalacia</li><li>d) Osteitis fibrosa cystica</li><li>e) Paget's disease</li></ul>	E
<p>5. <u>The most common bone tumor is:-</u></p> <ul style="list-style-type: none"><li>a) Osteosarcoma</li><li>b) Osteochondroma</li><li>c) Giant cell tumor</li><li>d) Metastatic tumors</li><li>e) Chondrosarcoma</li></ul>	D



**Characteristics of osteosarcoma of bone include:-**

- a) Primary occurrence develops at the age of 5th decade
- b) The tumor starts in epiphysis of long bones
- c) Formed of basophilic cells resembling lymphocytes
- d) New bone formation giving sun-ray appearance
- e) Tumor cells are PAS positive

D

**7. Osteosarcoma is characterized by:-**

- a) Is rare in the metaphysis of long bones
- b) Spreads mostly by lymphatic pathway
- c) Gives onion skin appearance on radiograph
- d) Has a good prognosis
- e) Occurs most commonly between the ages of 10 and 25 years

E

**8. In osteosarcoma, all are true except:-**

- a) Common in the metaphysis of long bones
- b) Spreads mostly by lymphatics
- c) May give "sunray spicules" appearance on radiograph
- d) Is the commonest primary malignant bone tumor
- e) Occurs most commonly between the ages of 10 and 25 years

B

**9. Sunray appearance is characteristic feature of:-**

- a) Osteoma
- b) Osteoblastoma
- c) Osteosarcoma
- d) Chondroma
- e) Chondrosarcoma

C

**10. The following is not characteristic for osteosarcoma:-**

- a) Common in the second decade of life
- b) Arises in the metaphysis
- c) Always appear as an osteosclerotic lesion
- d) Spreads early by blood
- e) Of high grade malignancy

C



<p><b>11. In chondrosarcoma, all are true except:-</b></p> <ul style="list-style-type: none"><li>a) Is a malignant tumor showing chondroid matrix</li><li>b) Usually run a more prolonged course than osteosarcoma</li><li>c) May arise from a pre-existing benign cartilaginous tumor</li><li>d) Commonly arises in the pelvis or ribs</li><li>e) Commonly occurs under the age of 30 years</li></ul>	<b>E</b>
<p><b>12. Giant cell tumor may spread:-</b></p> <ul style="list-style-type: none"><li>a) Only locally</li><li>b) Only by lymphatics</li><li>c) Only by blood</li><li>d) Local + lymphatic + blood</li><li>e) None of the above</li></ul>	<b>A</b>
<p><b>13. Osteosarcoma tends to occur in:-</b></p> <ul style="list-style-type: none"><li>a) Epiphysis</li><li>b) Diaphysis</li><li>c) Metaphysis</li><li>d) Articular cartilage</li><li>e) Tendons</li></ul>	<b>C</b>
<p><b>14. Multiple Chondromas + Benign angiomas is called:-</b></p> <ul style="list-style-type: none"><li>a) Ollier syndrome</li><li>b) Maffucci syndrome</li><li>c) Gardener syndrome</li><li>d) Multiple hereditary exostosis</li><li>e) McCune Albright syndrome</li></ul>	<b>B</b>
<p><b>15. A patient 50 years with pathological fracture. X-ray revealed multiple osteolytic lesions in the vertebrae. These bony lesions are mostly:-</b></p> <ul style="list-style-type: none"><li>a) Osteomyelitis</li><li>b) Osteosarcoma</li><li>c) Ewing's sarcoma</li><li>d) Multiple myeloma</li><li>e) Pott's disease</li></ul>	<b>D</b>



<p><b>16. Multiple Myeloma is a tumor of:-</b></p> <ul style="list-style-type: none"><li>a) Lymphocytes</li><li>b) Plasma cells</li><li>c) Mast cells</li><li>d) Neuroectodermal cells of bone marrow</li><li>e) Promyelocytes</li></ul>	<b>B</b>
<p><b>17. The following carcinoma may produce osteosclerotic bone metastasis:-</b></p> <ul style="list-style-type: none"><li>a) Bronchogenic carcinoma</li><li>b) Thyroid carcinoma</li><li>c) Renal cell carcinoma</li><li>d) Breast carcinoma</li><li>e) Prostatic carcinoma</li></ul>	<b>E</b>
<p><b>18. Painful radiolucent lesion in distal femur (1 cm) which is relieved by aspirin:-</b></p> <ul style="list-style-type: none"><li>a) Osteosarcoma</li><li>b) Chondroma</li><li>c) Osteoid osteoma</li><li>d) Osteoblastoma</li><li>e) Osteoma</li></ul>	<b>C</b>
<p><b>19. Translocation t-(11,21) is characteristic for:-</b></p> <ul style="list-style-type: none"><li>a) Ewing sarcoma</li><li>b) Osteosarcoma</li><li>c) Multiple myeloma</li><li>d) McCune Albright syndrome</li><li>e) Cortical fibrous defect</li></ul>	<b>A</b>
<p><b>20. Which of the following malignant tumors most commonly presents in children:-</b></p> <ul style="list-style-type: none"><li>a) Chondrosarcoma</li><li>b) Ewing sarcoma / PNET</li><li>c) Liposarcoma</li><li>d) Leiomyosarcoma</li><li>e) Undifferentiated high-grade pleomorphic sarcoma</li></ul>	<b>B</b>



21. Ewing's sarcoma gives onion skin appearance on X-ray because of:-

- a) Bone destruction
- b) Infiltration of bone cortex
- c) Subperiosteal new bone formation
- d) Presence of areas of necrosis
- e) Subperiosteal fibrosis

22. Characteristics of Ewing sarcoma of bone include all of the followings except:-

- a) Primary occurrence develops at age younger than 20 year
- b) The tumor starts at the epiphysis of long bone
- c) New bone formation in layers giving onion-skin pattern
- d) Formed of basophilic cells
- e) Tumor cells contain intra-cytoplasmic glycogen

23. The most common site for chondrosarcoma among those is:-

- a) Proximal femur
- b) Around the knee joint
- c) Metatarsal bones
- d) Scapula
- e) Mandible

24. Osteosarcoma tends to occur in which of the following:-

- a) Diaphysis
- b) Metaphysis
- c) Epiphysis
- d) Articular cartilage
- e) Tendon

25. Microscopic examination of bone tumor revealed atypical spindle cells related to malignant osteoid formation and wide areas with malignant cartilage formations. The diagnosis is:-

- a) Osteochondroma
- b) Chondrosarcoma
- c) Chondroblastic osteosarcoma
- d) Osteoblastic osteosarcoma
- e) Metaphyseal fibrous defect



<p>26. <u>Microscopic examination of pathological bone fracture reveals malignant squamous epithelial cells with keratin formation. The diagnosis is:-</u></p> <ul style="list-style-type: none"> <li>a) Metastatic skin cancer</li> <li>b) Multiple myeloma</li> <li>c) Non-ossifying fibroma</li> <li>d) Paget's disease</li> <li>e) Fibrous dysplasia</li> </ul>	A
<p>27. <u>The most common primary malignant bone tumor:-</u></p> <ul style="list-style-type: none"> <li>a) Osteosarcoma</li> <li>b) Osteochondroma</li> <li>c) Giant cell tumor of bone</li> <li>d) Metastatic tumors</li> <li>e) Chondrosarcoma</li> </ul>	A
<p>28. <u>Microscopic examination of bone tumor revealed sheets of atypical round cells with glycogen rich cytoplasm and no osteoid formation. Diagnosis is:-</u></p> <ul style="list-style-type: none"> <li>a) Metastatic breast cancer</li> <li>b) Osteblastoma</li> <li>c) Ewing's sarcoma</li> <li>d) Multiple myeloma</li> <li>e) Osteosarcoma</li> </ul>	C
<p>29. <u>Onion skin appearance on X-ray is characteristic of:-</u></p> <ul style="list-style-type: none"> <li>a) Osteosarcoma</li> <li>b) Bone metastasis</li> <li>c) Ewing's sarcoma</li> <li>d) McCune Albright syndrome</li> <li>e) Osteoid osteoma</li> </ul>	C
<p>30. <u>The nidus surrounded by sclerotic rim is a hallmark sign of:-</u></p> <ul style="list-style-type: none"> <li>a) Osteochondroma</li> <li>b) Osteoid osteoma</li> <li>c) Osteoma</li> <li>d) Chondroma</li> <li>e) Bone secondaries</li> </ul>	B



<p><b>31. <u>Teenager with multiple pulmonary lesions. Microscopic examination revealed malignant osteoid. Which of the following is mostly diagnosis:-</u></b></p> <ul style="list-style-type: none"><li>a) Multiple chondrosarcomas</li><li>b) Metastatic osteoma</li><li>c) Metastatic osteosarcoma</li><li>d) Metastatic osteoblastoma</li><li>e) Metastatic giant cell tumor of bone</li></ul>	<b>C</b>
<p><b>32. <u>All of the followings are primary bone tumors except:-</u></b></p> <ul style="list-style-type: none"><li>a) Osteoma</li><li>b) Metastatic tumors</li><li>c) Chondroma</li><li>d) Ewing sarcoma</li><li>e) Giant cell tumor of bone</li></ul>	<b>B</b>
<p><b>33. <u>The most common site affected by osteoma is:-</u></b></p> <ul style="list-style-type: none"><li>a) Femur</li><li>b) Vertebral column</li><li>c) Skull bones</li><li>d) Ribs</li><li>e) Pelvic bone</li></ul>	<b>C</b>
<p><b>34. <u>The most common site affected by osteoblastoma:-</u></b></p> <ul style="list-style-type: none"><li>a) Femur</li><li>b) Vertebral column</li><li>c) Skull bones</li><li>d) Ribs</li><li>e) Pelvic bone</li></ul>	<b>B</b>
<p><b>35. <u>The most common site affected by Ewing sarcoma:-</u></b></p> <ul style="list-style-type: none"><li>a) Femur</li><li>b) Vertebral column</li><li>c) Skull bones</li><li>d) Ribs</li><li>e) Pelvic bone</li></ul>	<b>A</b>