

## NEOPLASIA

1. malignant neoplasms
  - a. are independent of hormonal influence
  - b. are always composed of homogenous cell lines
  - c. arise from differentiated cells by a process of anaplasia
  - d. display abnormal nuclei with pale nucleoli
  - e. typically are more rapidly growing than benign neoplasms
  
2. Regarding metastasis
  - a. All carcinomas have the ability to metastasise
  - b. Highly invasive carcinomas rarely metastasise
  - c. Carcinomas typically spread via lymphatics compared with haematogenous spread
  - d. Tumour cells develop increased cohesiveness of their cell surface in the formation of cancer cell emboli
  - e. Cells involved in lymphatic dissemination release degradative enzymes
  
3. Which of the following tumour is benign
  - a. Chondrosarcoma
  - b. Osteochondroma
  - c. Chondroblastoma
  - d. Ewing's tumour
  - e. None of the above
  
4. A 50yo woman presents with back pain, Xrays suggest a malignant deposit in T10. The least likely primary would be
  - a. breast
  - b. ovary
  - c. thyroid
  - d. kidney
  - e. colon
  
5. Which of the following is malignant
  - a. Squamous cell papilloma
  - b. Hydatidiform mole
  - c. Chondroma
  - d. Mature teratoma
  - e. Bronchial carcinoid
  
6. All of the following are precancerous except
  - a. Chronic gastritis of pernicious anaemia
  - b. Solar keratosis
  - c. Crohn's disease
  - d. Leukoplakia
  - e. Chronic UC

7. with regard to tumours
  - a. dysplasia always progresses to cancer
  - b. cystic teratomas are malignant
  - c. squamous papillomas are benign
  - d. the presence of mitoses indicates neoplasia
  - e. hypochromasia is characteristic of anaplasia
  
8. Metastasis
  - a. Unequivocally proves malignancy
  - b. Is proven by LN enlargement adjacent to a tumour
  - c. Of breast cancer is usually to supraclavicular LN
  - d. Is the commonest presentation of melanoma
  - e. All of the above
  
9. The most common cause of cancer death in women is
  - a. Colorectal cancer
  - b. Lung cancer
  - c. Pancreatic cancer
  - d. Breast cancer
  - e. Lymphoproliferative tumours
  
10. The following viruses are considered to be oncogenic
  - a. Hepatitis B
  - b. Hepatitis C
  - c. EBV
  - d. HPV
  - e. All of the above
  
11. Features that help differentiate benign from malignant tumours include all except
  - a. The degree of both morphological and functional differentiation of the cells
  - b. The number of mitoses
  - c. The presence or absence of a capsule
  - d. The number of cells per unit area
  - e. The formation of multinucleate giant cells

12. concerning carcinogenesis
- most benign neoplasms, given enough time, will undergo malignant transformation
  - anti-oncogenes are growth suppressed proto-oncogenes
  - non-lethal genetic damage has little to do with carcinogenesis
  - proto-oncogenes may become oncogenes by retroviral transduction (v-ons) or by influences that alter their behaviour in situ, thereby converting them into cellular oncogenes (c-ons)
  - chromosomal translocation usually results in underexpression of proto-oncogenes
13. Which is correct
- Spontaneous mutation is the most common process leading to tumour formation
  - Genes that regulate apoptosis are not involved in tumour formation
  - Some organs liberate chemoattractants that tend to recruit tumour cells to the site
  - Substances which are highly mutagenic are labeled tumour promoters
  - All cell types are equally susceptible to radiation-induced cancer formation
14. Malignant lymphoma include all of the following except
- Hodgkin's lymphoma
  - Reed-Sternberg giant cell lymphoma
  - Mycosis fungoides
  - NHL
  - Burkitt's lymphoma
15. Regarding oncogenes
- Their products are associated with metaplasia
  - Proto-oncogenes are involved with normal cell growth and differentiation
  - Proto-oncogenes are activated by one of 4 different mechanisms
  - 40% of all human tumours carry mutated H-ras or K-ras oncogenes
  - fibroblast growth factors play a role in SCC of the lung
16. Regarding malignant neoplasms
- Breast cancer is the commonest cause of death in females 55-74yo
  - There is no familial clustering of ovarian cancer
  - There is reasonable evidence available linking benzene with lung cancer
  - Rates of lung cancer have doubled in the last 40 years
  - Brain tumours are the most common cancerous cause of death in the under 15yo

17. Invasion by metastases includes
  - a. Separation of tumour cells from each other
  - b. Attachment to matrix components
  - c. Type I collagenases degrading extracellular matrix
  - d. Absorption of proteolytic enzymes
  - e. Separation of tumour cells from laminin and fibronectin
  
18. All of the following characterize familial tumours except
  - a. Earlier age at onset
  - b. Close relatives with the same tumours
  - c. Multiple or bilateral tumours
  - d. Specific marker phenotypes
  - e. Increased relative risk in siblings
  
19. Malignant tumours
  - a. When arising from epithelial cells are called sarcomas
  - b. Are well differentiated
  - c. When arising from glandular cells are called adenocarcinoma
  - d. Rarely metastasise
  - e. Always possess tumour giant cells
  
20. development of metastatic potential in melanoma is heralded by
  - a. change in colour
  - b. change in size
  - c. nodule development
  - d. change in the degree of pigmentation
  - e. development of localized itching
  
21. malignant neoplasms
  - a. are undifferentiated
  - b. almost always exhibit rapid growth
  - c. are proven by discovery of metastases
  - d. do not commonly exhibit mitotic figures
  - e. are not locally invasive
  
22. To which 2 organs do tumours most commonly spread haematogenously
  - a. Lung & brain
  - b. Liver & lungs
  
23. The commonest cause of thyroid carcinoma is
  - a. Medullary
  - b. Follicular
  - c. Papillary
  - d. Anaplastic
  - e. Squamous

24. Internal carcinoma is associated with which of the following skin disorders  
a. Acanthosis nigrans

ANSWERS

1. E
2. E
3. B
4. D
5. E
6. C
7. C
8. A
9. B
10. E
11. D
12. D
13. C
14. B
15. B
16. D
17. B
18. D
19. C
20. C
21. C
22. B
23. C
24. -
- 25.