

Q1 Q2 Q4

Kashaf Ahmaad
3rd year MBBS

AZRA NAHEED MEDICAL COLLEGE.

TEST 3RD YEAR MBBS

NEOPLASIA

Time 50 min

- Asbestose - lung
- DATE 5/7/2017
- benzene - leukemia
- Arsenic - lung cancer
- cadmium - Prostate, Nickel - Nose

Q. A 50 year old man working in factory of plastic pipes has noted weight loss nausea and vomiting over the past 5 months Abdominal CT scan shows liver mass showing angiosarcoma of liver

- a) Which chemical carcinogen has led to this tumor 1 vinyl chloride (indirect acting)
- b) Names for other chemical agents causing tumors with associated cancer 2
- c) What is difference between direct acting and indirect acting chemical carcinogens give one example of each 2
no metabolic (Tab-5-4) P#199
conversion

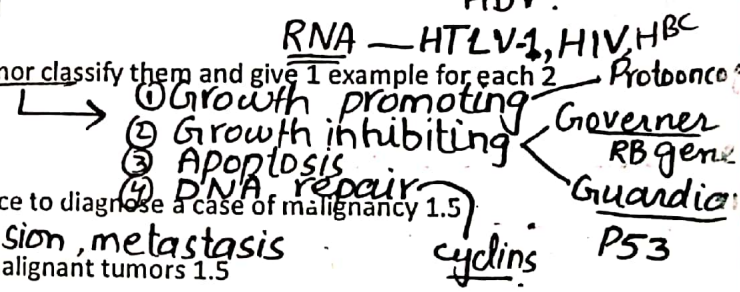
Q. 2 A 40 year old female has foul smelling vaginal discharge for 2 weeks. She is a commercial sex worker in past. On physical examination there is 3-cm mass in cervix showing features of well differentiated squamous cell carcinoma

- a) Which oncogenic virus and its geno type is associated with this tumor 1 HPV - DNA virus
- b) Right 2 DNA and 2 RNA oncogenic viruses with associated tumors 2 DNA HPV, EBV, HBV
- c) How do you grade and stage a tumor 1.5
- d) Name 1 staging system 0.5 ATC, TNM

Q. 3 What are different types of genes involved in tumor classify them and give 1 example for each 2

B what is the mechanism of action of P53 gene 1.5
CT scan, X-rays, MRI

C What are different techniques used in medical practice to diagnose a case of malignancy 1.5
differentiation, growth, invasion, metastasis



Q. 4 a) write down differences between benign and malignant tumors 1.5

- PSA
- Prostate carcinoma
- CEA
- colon
- alpha-fetoprotein
- hepato cellular carcinoma
- hCG
- choriocarcinoma

b) Enumerate four tumor markers with associated tumors 2
cushing syndrome, Nephrotic syndrome, Anemia

c) Define paraneoplastic syndrome, Give 2 examples 1.5

d) What are different steps of spread of tumors. 1.5
① seeding of body cavities
② Lymphatogenic
③ Hematogenic

Q. 5 A patient with diabetes presents in the medical OPD with white exudate on his oral mucosa; and other female patient who completed course of antibiotics presents with itchy and copious vaginal discharge.

- a) What is the likely diagnosis and causative organism in above cases 0.5
Candida Albicans,
Vaginosis, Thrash.

- ② serologic test
 ③ Culture of organism
 ④ Direct microscopic examination

- Coccidioides,
 → Histoplasma,
 → Blastomyces
 → Paracoccidioides

- b) How do you diagnosed a fungal infection in lab. Give 4 lab methods of diagnosis 2
 c) What are different types of systemic mycoses 1
 d) Name the organism causing athlete's foot, also mention 3 genera of dermatophytes 1.5

→ Trichophyton, Epidermophyton, Microsporus
 Q.6 The formation of granulomas is seen in major fungal infections

- a) Name the fungi which cause granuloma formation 0.5 (Aspergillus fumigatus)
 b) What is the pathogenesis of its invasive form 2 clonize → invade → lung → granuloma →
 c) Name the organism which can be involved opportunistic infections 1 lung cavities → fungal ball
 d) A fifty years old boy suffering from AIDS presented with headache, neck stiffness CSF examination shows high lymphocytes count low glucose and high protein. Fungal infection is seen Cryptococcus meningitis.
 Give morphology of this organism along with aspergillus and candida. 1.5
 aspergillosis, infection of eye, ear, skin
 vaginitis, candidiasis, Dipep rash, thrush.

Candida albicans

Grades :-

- 1 → well differentiated
 2 → moderate "
 3 → Poor "
 4 → undifferentiated (Anaplastic)

Stages :-

1) AJC

② TNM

T = tumor.



- T1 -
 T2 -
 T3 -
 T4 -
- Increasing size tumor.

lymph node

- N - N0 -
 N1 -
 N2 -
 N3 -

Progressive enlargement of lymph node.

- M - Metastasis
 M0 - absence
 M1 - presence.

DATE 5/3/2019

Time 65 min

Q. A 50 year old man working in a storage for grains and nuts developed a liver mass. Abdominal CT scan shows liver mass showing hepatocellular carcinoma.

- a) Which chemical carcinogen has led to this tumor? *1. Vinyl chloride. P230*
- b) Names three other chemical agents causing tumors with associated cancer 1.5 *230*
- c) Describe the pathogenesis of Chemical carcinogenesis is tabulated form. 2.5 *230*

Arsonic, chromium, Nickel, insecticide, Fungicides, Polychlorinated Biphenyls, Nitrosamines.

Q. 2 Write short notes on

- a) Viral Oncogenesis. 2.5 *239+234*
- b) Grading and staging of tumours. 2.5 *236*

Q. 3 What are different hall marks of cancer, enumerate them and give description of any two in detail. 2+3. *205*

Q-4 Describe the mechanism of action of P53, RAS and Rb Gene. 5 *212 206 212*

Q-5 What are different techniques used in medical practice to diagnose a case of malignancy 3 *Page 241, Summary*

b) Enumerate four tumor markers with associated tumors *2239 AFP, PSA, CEA, hepatocellular carcinoma*

Q. 6 a) Write down differences between benign and malignant tumors 1.5. *242*

B) What are different characteristics of tumours. 3.5 *P# 192 Rate of growth ↑, many dividing cell, loss of normal cell features, Disorganized arrangement, variation in size and shape, unstable, large, variably shaped nuclei, loss of differentiation*

Q-7 What are different modes of spread of tumors and describe the mechanism of spread of tumors 1.5+3.5 *Invasion and metastasis*

Q-8 Explain

- a) Paraneoplastic syndrome with examples 2 *236*
- b) Choristoma 0.5
- c) Hamartoma 0.5 *191*
- d) Difference between mixed tumour and teratoma 1 *191*
- e) Four malignant tumours ending with word "oma". 1 *Fibrosarcoma, adenoma, Papilloma, cystadenoma, chondrosarcoma, adrenocarcinomas*

Mixed Tumors

Irregular differentiation of a single P. 192. line of paraneurymal cells into an other tissue - these tumor arise from single germ layer - e.g: Mixed tumor of salivary gland -

Teratoma:- Made up of variety of paraneurymal cells, arise from more than one germ layer - these tumor arise from totipotent cells.

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- Which chemical carcinogen has led to this tumor 1 → vinyl chloride.
- Names for other chemical agents causing tumors with associated cancer? *Dr. Amna #125*
- What is difference between direct acting and indirect acting chemical carcinogens give one example of each 2

Q. 2 A 40 year old female has foul smelling vaginal discharge for 2 weeks. She is a commercial sex worker in past. On physical examination there is 3-cm mass in cervix showing features of well differentiated squamous cell carcinoma

- Which oncogenic virus and its geno type is associated with this tumor 1 *HPV → cervical cancer.*
- Right 2 DNA and 2 RNA oncogenic viruses with associated tumors 2
- How do you grade and stage a tumor 1.5
- Name 1 staging system 0.5

Q. 3 What are different types of genes involved in tumor classify them and give 1 example for each 2

B. what is the mechanism of action of P53 gene 1.5

C. What are different techniques used in medical practice to diagnose a case of malignancy 1.5

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c) Define paraneoplastic syndrome, Give 2 examples 1.5

d) What are different steps of spread of tumors. 1

Q. 5 A patient with diabetes presents in the medical OPD with white exudate on his oral mucosa, and other female patient who completed course of antibiotics presents with itchy and copious vaginal discharge.

- What is the likely diagnosis and causative organism in above cases 0.5 *C. albican*

*DSA
Calcitonin
ACC*

- b) How do you diagnosed a fungal infection in lab. Give 4 lab methods of diagnosis 2
- c) What are different types of systemic mycoses 1
- d) Name the organism causing athletes foot, also mention 3 genera of dermatophytes 1.5

Q.6 The formation of granulomas is seen in major fungal infections

- a) Name the fungi which cause granuloma formation 0.5 *Aspergillus → systemic organ*
 - b) What is the pathogenesis of its invasive form 2
 - c) Name the organism which can be involved opportunistic infections 1
 - d) A fifty years old boy suffering from AIDS presented with headache, neck stiffness CSF examination shows high lymphocytes count low glucose and high protein. Fungal infection is *cryptococcus neoformans* seen
- Give morphology of this organism along with aspergillus and candida. 1.5

6 @ coccidioidomycosis, Histoplasmosis, blastomycosis.

⊕ In immunocompromised, infect lung → hemoptysis, fever
 spread via vasculature → Renal failure,
 heart pathologies along with ring enhance lesion of brain
 and nasal necrosis.

PATHE.

ATHAD



Department of Pathology
Azra Naheed Medical College
MBBS 3rd Year

Time Allowed: 60 min

2018
Total Marks: 30

neoplasia.

Name: ~~XXXXXXXXXX~~

Roll No: ~~XXXXXXXXXX~~

Date: 17-7-18

Q1: Give gross and microscopic differences of benign and malignant tumours (2.5) 2

a) What are the characteristics of a malignant cell? (2.5) 2

Q2: A 50 years old female presented with ovarian mass ; what possible ways a tumour can adopt for its spread. 1.5 1.5

B) Give Diagrammatic representation of spread of tumours 3.5 3 ??

Q-3 Q. A 50 year old man working in a factory developed mesothelioma along with lung carcinoma

- a) Which chemical carcinogen has led to this tumor 1. Asbestosis 1
- b) Names four other chemical agents causing tumors with associated cancer 2
- c) What is difference between direct acting and indirect acting chemical carcinogens, Give the role of initiators and promoters. 2

Q. 4 A 40 year old female has foul smelling vaginal discharge for 2 weeks. She is a commercial sex worker in past. On physical examination there is 3-cm mass in cervix showing features of well differentiated squamous cell carcinoma

- a) How do you grade and stage a tumor 2.5 2.5
- b) What are different grading and staging systems 2.5

Q. 5 What are different types of genes involved in tumor formation ,

A) classify them and give 1 example for each. 3.5

✓

B) What is the mechanism of action and role of Guardian of genome P53 gene. 1.5

Q-6a- What are different techniques used in medical practice to diagnose a case of malignancy. Eneumerate their names. 1

B) write short notes on 1) paraneoplastic syndromes 2

2) Tumour markers 2

Q-7 Discuss the role of precursor lesions of cancer. 5