

## MCQ's

**1- The most likely possibilities as regards to the cell of origin in KS is:**

- a) Mesenchymal cell
- b) Dermal dendrocytes
- c) Pluripotential mesenchymal stem or a differentiated lymphatic or blood vessel endothelial cell
- d) Dermal Fibroblast

**2- All of the following cytokines considered as a growth promoting in KS except:**

- a) Interleukin 1
- b) Interleukin 2
- c) Interleukin 6
- d) Oncostatin M

**3 - All of the following cytokines considered as an inhibitory cytokines except:**

- a) Interleukin 4
- b) Interferon - alpha
- c) Interleukin 2
- d) Interleukin 6

**4 - The only proved causative association between any agents and KS found only with:**

- a) Human herpes virus 6
- b) Human herpes virus 8
- c) Epstein-Barr virus
- d) Cytomegalovirus

**5 - When considering therapy of Kaposi's Sarcoma the following is true:**

- a) It is not life threatening disease so can be left with no treatment
- b) Individualized approach must be adopted considering the clinical setting, extent of KS, presence of opportunistic infection and immune state of the patient.
- c) The disease is highly aggressive, so aggressive treatment is required
- c) Monotherapy is preferable than multitherapy

**6 - The most common side effect of intralesional cytotoxic chemotherapy of KS lesion with vinblastin is:**

- a) Intense odema
- b) Pain
- c) Blistering
- d) Scars

**7 - The most common side effects of systemic INF-alpha treatment include:**

- a) Influenza like symptoms
- b) Anemia and transient Neutropenia
- c) Relapses may occur during therapy

- d) All of the above
- e) None of the above

**8 - The exact mode of action of INF-alpha is not yet clear but the following have in vivo and in vitro evidence of:**

- a) Antiviral
- b) Antiproliferative
- c) Antiangiogenic
- d) Immunoregulatory effects by enhancing a local T-cell mediated immune response
- e) All of the above

**9 - Immunosuppressive treatment - related KS was found to have which of the following natural history when-Immunosuppression treatment is reduced or stopped.**

- a) KS regresses
- b) It is unaffected
- c) KS gets more aggressive
- d) Tumor recur at surrounding sites

**10 - New KS, clinical variance have been recently described:**

- a) Telangectatic
- b) Generalized lymphedema
- c) Ecchymotic & Keloidal
- d) Ulcerated
- e) a, b & c are correct

**11- The four forms of KS differ with respect to their:**

- a) Clinical presentation
- b) Evolution
- c) Immunological character
- d) Histologic features are similar
- e) All of the above

**12- In the treatment of localized disease in AIDS related KS, the following is considered except:**

- a) Surgical excision
- b) Liquid Nitrogen cryotherapy
- c) Laser therapy
- d) Radiotherapy
- e) Local injection
- f) Zidovudine

**13 - In Radiotherapy of AIDS related KS:**

- a) Complication with any given dose are more than with non-HIV infected patients
- b) Local recurrence is less common
- c) Radio therapy is highly effective for mucosal lesions
- d) A fractionated course is less effective

**14 - The mode of action of (3% sodium tetradecyl sulfate) Intralesional injection is:**

- a) Induction of ischemic necrosis

- b) Provocation of inflammation
- c) Anti-angiogenic factor
- d) Immunomodulatory effect

**15 - The following is true regarding intra lesional therapy with 3% sodium tetradecyl sulfate:**

- a) It is effective, inexpensive and has fast response
- b) Long remissions
- c) Disadvantages are pain, scarring, ulceration
- d) All of the above

**16 - Intra lesional recombinant granulocytes-macrophage colony stimulating factor (GM-CSF):**

- a) Mode of action is through provocation of inflammation
- b) Local Necrosis
- c) Used as intra lesional treatment of AIDS-related KS
- d) Affect the level of IL-2
- e) a, b & c are true

**17- All of the following are true regarding Aliretinoid except:**

- a) It is (a naturally occurring endogenous retinoid 9-cis-retinoic acid)
- b) Serve as transcription factor and regulate the expression of genes involved in control of cell differentiation and proliferation.
- c) Used as topical or systemic therapy
- d) Is highly effective for GIT KS
- e) c & d are incorrect

**18- Toxicities related to topical treatment of Aliretinoid include:**

- a) Exclusively limited to the site of medication
- b) Rash, pain, paresthesia
- c) Peripheral neuropathy
- d) Extend beyond site of application
- e) a, b are correct

**19 - Anthracyclines is used as a single agent chemo therapy for AIDS-related KS and it includes:**

- a) Doxorubicin & Daunorubicin
- b) Epipodophyllotoxins
- c) Bleomycin
- d) Vincristine

**20 - Following side effects are observed with Chemotherapy for KS include all except:**

- a) Myelosuppression
- b) Neurotoxicity
- c) Pulmonary toxicity
- d) Gastrointestinal toxicity
- e) CNS toxicity

**21- Liposomal Anthracyclines:**

- a) Has a prolonged half-life by changing drug kinetics
- b) PEG (polyethylene glycol) in liposomal preparation diminishes the reticuloendothelial drug uptake
- c) Tends to accumulate in tumor cells at higher concentration, so deliver a higher toxicity to the targeted cells.
- d) The response to PEG-coated liposomal doxorubicin was superior to combination regimen of doxorubicin - bleomycin-vincristine
- e) All of the above

**22- PEG-coated liposomal Doxorubicin although better tolerated by patient than combination regimen of BV,it was found to be:**

- a) More myelotoxic
- b) Associated with an increased incidence of infection
- c) Less alopecia, neuropathy, nausea and vomiting
- d) All of the above
- e) None of the above

**23- Paclitaxel is a new cytotoxic agent used for KS:**

- a) It has antitumor effect
- b) Antiviral effect
- c) Antiangiogenic effect
- d) Stabilizes microtubules in patients with KS
- e) a, c, d are correct

**24- Adverse effect with Paclitaxel which is usually a dose limiting adverse effect is:**

- a) Neutropenia
- b) Angiodema and hypersensitivity reaction
- c) Anemia
- d) Hypotension and dyspnea

**25- Vinorelbine a cytotoxic agents used in KS treatment:**

- a) Has evidence of anti-tumor activity
- b) Anti-angiogenic effect
- c) Is relatively safe and well tolerated
- d) Has sever myelosuppressive effect
- e) a & c are correct

**26- All of the following are true regarding the use of INF-alpha in treatment of AIDS related KS except:**

- a) INFs are protein and glycoproteins with antiviral, immunodulatory and antiproliferative activities
- b) The first sign of tumor regression is usually noted within 4 months, but maximal responses generally require 6 or more months of treatment

- c) The factors associated with a poor response to INF therapy include prior or present opportunistic infections, systemic symptoms and CD4 counts < 200 cell/mm<sup>3</sup>.
- d) INF-alpha is highly effective in treating AIDS - related KS either as a monotherapy or a combination therapy.

**27- IM 862 ( a dipeptide isolated from the soluble fractions of the Thymus) has antitumor activity in AIDS-KS was found to have which of the following:**

- a) Its mode of action is mainly through inhibition of angiogenesis
- b) Has a severe myelosuppressive effect which is limiting its use
- c) Given as an intramuscular injection at a dose of 5mg
- d) Non of the above

**28 - TNP-470 (a molecule extracted from Aspergillus Fumagatus Fresensius) has which of the following character:**

- a) In which bFGF- induced endothelial cell proliferation
- b) Less active and more toxic than fumagiltin
- c) Given as an oral suspension every 12 hours
- d) It is an analog of vinorelbine, and has an antineoplastic effect

**29- SU 5416 used to inhibit growth of KS cell through:**

- a) Inhibition of IL1 production
- b) Suppression of Granulocytes - macrophages colony stimulating factors
- c) Inhibition of vascular endothelial growth factor
- d) Stimulation of IL2 productions

**30- Teclogalan:**

- a) Is a small compound isolated from the cell membrane of Arthobacter species AT-25
- b) Inhibit growth of both endothelial & KS spindle cells in vitro
- c) Given through Intravenous route on weekly interval for 4 weeks
- d) All of the above

**31 - Endostatin:**

- a) Inhibit tumor cell growth in vivo by blocking angiogenesis
- b) Is a protein represents a fragment of collagen XVIII
- c) Inhibit tumor cell growth by inhibiting the production of TNF-alpha
- d) a and b correct

**32- Interlukin 12 (IL-12):**

- a) It has a potent inhibition of angiogenesis in KS by -

- inducing production of Interferon-gamma
- b) Given in a dose as high as 500mg/kg induce a reversible hepatotoxicity
- c) All of the above
- d) None of the above

**33- Vesnarinone is a new potential therapeutic approach in treatment of AIDS-associated KS its mode of action is through:**

- a) Inhibition of TNF and IL6 production
- b) Inhibition of Pro IL4 production
- c) Induce sclerosis of endothelial cells and a subsequent ischemic necrosis
- d) It has an immunomodulatory effect on CD4 cells

**34 - Which of the following is true regarding treatment of AIDS related KS:**

- a) Liposomal encapsulated preparation of trans-retinoic acid exerts its main biological effect through inhibition of IL-6 production
- b) Human chronic gonadotropin (HCG) induce progression in growth of KS
- c) KS regression is linked to decreased HIV replication with associated restoration of immune function
- d) a & b are correct

	(a) -27	(f) -21
	(e) -23	(e) -11
(p) -24	(p) -22	(e) -10
(a) -23	(e) -21	(a) -9
(c) -22	(e) -20	(e) -8
(p) -21	(a) -19	(p) -7
(p) -20	(e) -18	(b) -6
(c) -19	(e) -17	(b) -5
(a) -18	(e) -16	(b) -4
(a) -17	(d) -15	(d) -3
(b) -16	(a) -14	(b) -2
(e) -15	(a) -13	(c) -1

Answers to MCQ's