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 Q1.What is shock? Explain it with types.

Answer.

 Shock is a life-threatening condition that occurs when the body is not getting enough blood flow.

Lack of blood flow means the cells and organs do not get enough oxygen and nutrients to function properly.

Many organs can be damaged as a result. Shock requires immediate treatment and can get worse very rapidly.

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As many 1 in 5 people who suffer shock will die from it.

The main types of shock include:

Cardiogenic shock (due to heart problems)

Hypovolemic shock (caused by too little blood volume)

Anaphylactic shock (caused by allergic reaction)

Septic shock (due to infections)

Neurogenic shock (caused by damage to the nervous system

First sign of shock.

 Initial symptoms of shock include cold clammy hands and feet pale or blue-tinged skin tone

Weak fast pulse rate; fast rate of breathing low blood pressure. .

Question 2

.What do u know about Granulomatous inflammation?Explain in detail.

Granulomatous inflammation is a histologic pattern of tissue reaction which appears following cell injury.

Granulomatous inflammation is caused by a variety of conditions including infection, autoimmune, toxic, allergic, drug, and neoplastic conditions

Granulomatous inflammation is a distinctive form of chronic inflammation produced in response to various

 infectious,autoimmune, toxic, allergic, and neoplastic conditions

. It is defined by the presence of mononuclear leukocytes, specifically histiocytes (macrophages), which respond to various chemical mediators of cell injury.

This pattern of injury response occurs in all age groups and within all tissue sites.

 Through light microscopy, the activated histiocytes appear as epithelioid cells with round to oval nuclei, often with irregular contours and abundant granular eosinophilic cytoplasm with indistinct cell borders (Fig. 1). They may also coalesce to form multinucleated giant cells.

Identification and classification of the granulomatous inflammation pattern can be helpful in narrowing a clinical differential diagnosis. In a study of pulmonary granulomas, 23% of diagnoses could not identify the specific etiology via hematoxylin and eosin (H&E) at the time of biopsy. In this series, etiology identification improved to 90.8% with clinical features, radiographic findings, and improved laboratory methodologies, including molecular techniques, culture, immunohistochemical profiles, and serologic values

Types….

Foreign Body Talc, starch, suture, hyaluronic acid (and other injectable fillers)

Necrotizing Granulomas

 Infectious:

Coccidioides immitis/C. posadasii, Cryptococcus neoformans/C. gattii, Histoplasma capsulatum, Blastomyces dermatitidis, Aspergillus spp., Mucorales, Mycobacterium tuberculosis, Non-tuberculous mycobacteria, Brucella spp., Nocardia spp., Yersinia spp., Bartonella henselae, Pneumocystis jiroveci, Echinococcus granulosus, xanthogranulomatous pyelonephritis+

Autoimmune:

Rheumatoid nodule, granuloma annulare, necrobiosis lipoidica, granulomatosis with polyangiitis

Non-Necrotizing Granulomas.

Infectious\*: Candida albicans (hepatosplenic candidiasis), C. immitis/C. posadasii, Coxiella burnetii, cytomegalovirus, M. tuberculosis, non-tuberculous mycobacteria including M. leprae (tuberculoid forms), Schistosoma spp., Toxoplasma gondii, Rickettsia spp., Salmonella typhi, hepatitis A & C virii,

Autoimmune: Sarcoidosis, Churg Strauss, giant cell arteritis, systemic lupus erythematous, Crohn disease, primary biliary cirrhosis, orofacial granulomatosis, rosacea, granuloma annulare

Toxic: actinic granuloma, berylliosis, zirconium, hot tub lung

Drug: Bacillus Calmette-Guérin, Non-steroidal anti-inflammatory drugs, antibiotics, methotrexate

Other: Lymphoid interstitial pneumonia, hypersensitivity pneumonitis, chronic lymphocytic leukemia

Suppurative Granulomas Infectious:

Actinomyces spp., Dirofilaria spp., Acanthamoeba spp., Balamuthia mandrillaris, B. henselae, B. dermatitidis, Brucella spp., Chlamydia trachomatis (serotypes L1, L2, L3 causing lymphogranuloma venereum), dematiaceous fungi causing chromoblastomycoses and phaeohyphomycosis, non-tuberculous mycobacteria, Francisella tularensis, Prototheca spp., Sporothrix schenckii, Paracoccidioides brasiliensis, Yersinia spp., Enterobius vermicularis

.. >Histiocytic response, no granulomas<

Infectious: Tropheryma whipplei, Listeria monocytogenes, non-tuberculous mycobacteria including M. leprae (lepromatous forms), H. capsulatum, Leishmania spp., Rhodococcus spp. (with malakoplakia)

Other: Langerhans cell histiocytosis, granulomatous mycosis fungoides, juvenile xanthogranuloma, reticulohistiocytoma, Rosai Dorfman, pineal germinoma, seminoma/dysgerminoma, dendritic cell sarcoma, Erdheim-Chester disease, hemophagocytic lymphohistiocytosis, histiocytic sarcoma, interdigitating cell sarcoma, Langerhans cell sarcoma.

Question no 3..

What are the effects of use of tobacco on health?

Smoking causes cancer, heart disease, stroke, lung diseases, diabetes, and chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. Smoking also increases risk for tuberculosis,

certain eye diseases, and problems of the immune system, including rheumatoid arthritis.

Smoking leads to disease and disability and harms nearly every organ of the body.

More than 16 million Americans are living with a disease caused by smoking. For every person who dies because of smoking, at least 30 people live with a serious smoking-related illness. Smoking causes cancer, heart disease, stroke, lung diseases, diabetes, and chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. Smoking also increases risk for tuberculosis, certain eye diseases, and problems of the immune system, including rheumatoid arthritis.

Secondhand smoke exposure contributes to approximately 41,000 deaths among nonsmoking adults and 400 deaths in infants each year. Secondhand smoke causes stroke, lung cancer, and coronary heart disease in adults

* . Children who are exposed to secondhand smoke are at increased risk for sudden infant death syndrome, acute respiratory infections, middle ear disease, more severe asthma, respiratory symptoms, and slowed lung growth. Smoking leads to disease and disability and harms nearly every organ of the body.
* Tobacco use increases the risk for many types of cancer such as lung cancer
* Studies show a direct link between cigarette smoking and coronary heart diseases
* Smoking including during the teenage years increases the risk of dying from COPD.

Question no 4

What do u know about Malignant tumor?How to diagnose and what is its treatment?

Malignant tumors can grow quickly and spread to other parts of the body in a process called metastasis. The cancer cells that move to other parts of the body are the same as the original ones, but they have the ability to invade other organs.

Malignant tumors are cancerous. The cells can grow and spread to other parts of the body.

It is not always clear how a tumor will act in the future. Some benign tumors can become premalignant and then malignant. For this reason, it is best to monitor any growth.

Diagnoses.

Imaging tests used in diagnosing cancer may include a computerized tomography (CT) scan, bone scan, magnetic resonance imaging (MRI), positron emission tomography (PET) scan, ultrasound and X-ray, among others. Biopsy. During a biopsy, your doctor collects a sample of cells for testing in the laboratory.

Treatment..

Surgery.

The goal of surgery is to remove the cancer or as much of the cancer as possible.

Chemotherapy.

Chemotherapy uses drugs to kill cancer cells.

Radiation therapy. ...

Bone marrow transplant. ...

Immunotherapy. …

Hormone therapy. …

Targeted drug therapy. ...

Cryoablation.

Question no 5

Write a detail note about haemorrhage.

Bleeding, also called hemorrhage, is the name used to describe blood loss.

It can refer to blood loss inside the body, called internal bleeding, or to blood loss outside of the body, called external bleeding.

Blood loss can occur in almost any area of the body

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Internal bleeding occurs when blood leaks out through a damaged blood vessel or organ. External bleeding happens when blood exits through a break in the skin.

Blood loss from bleeding tissue can also be apparent when blood exits through a natural opening in the body, such as the:

mouth

vagina

rectum

nose