

Assignment

Course Title: Human Physiology

Instructor: Dr Sara Naeem

Total Marks: 80

NAME: EMAAN MALIK

ID: 16716

DEPARTMENT: AHS (DPT)

1. Explain any respiratory disease of your own choice. You have to write signs and symptoms, chest X-ray and treatment as well.

Ans: **RESPIRATORY DISEASE:**

A respiratory disease or condition takes place when a person's organs or tissues which carries out the respiration are affected and that person experiences difficulty in breathing.

LUNG CANCER:

In lung cancer the cancerous cells starts to form inside the lungs making it hard for the respiration systems to perform its job properly. The cells in the human body contains DNA, when a cell is divided the DNA is copied in the daughter cells. This is why daughter cells are considered the copies of the old mature cells. Through this process the old cells die and the daughter cells replace them. A cancer is formed when there is any abnormality in the cell's DNA. This abnormality can be the result of environmental factors (exposure to radon gas, cigarette etc) for the cell to become cancerous many serious of mutation takes place after that the cells becomes cancerous. Just like other normal cells cancerous cells also divides producing 2 more daughter cells than these two produce 4 cells and so on this way the amount or these harmful cells increases more and more with each division. These cells do not perform the functions like normal cells. In some severe cases when the cancer has been spread, the cancerous cells start to grow not only around the tumor but also in other parts of the body. This process is known as metastasis.

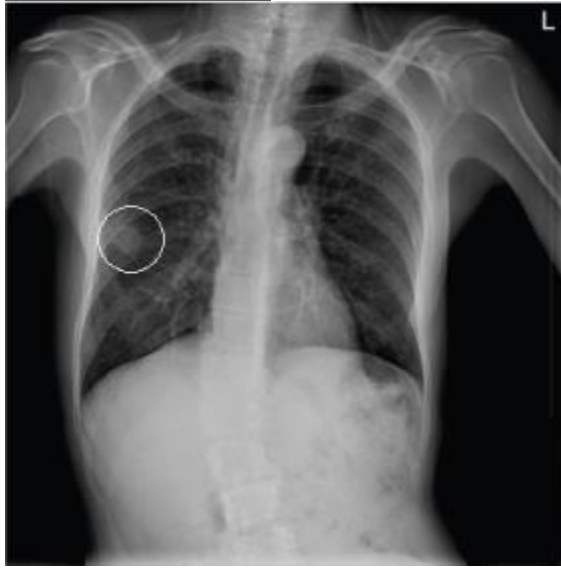
SIGNS / SYMPTOMS:

Following are the symptoms of lung cancer:

1. Constant cough
2. Chest pain
3. Bone pain

4. Headache
5. Coughing a blood
6. Weight loss
7. Shortness of breath
8. hoarseness
9. Fever
10. Difficulty in swallowing
11. Infections such as bronchitis and pneumonia that does not go away.

CHEST X-RAY:



TREATMENT:

Treatment of the patient is decided by keeping in mind the health condition of the patient and stage of the cancer. Following are some of the treatments which may help in curing the cancer.

RADIATION THERAPY:

In a radiation therapy beams which are high powered x-rays and protons are used to kill the cancer cells. The patient has to lay down and the machine moves around him throwing the rays on the targeted part of the body.

For the people with advanced cancer radiotherapy and chemo therapy before or after the surgery can help alot.

CHEMOTHERAPY:

In chemotherapy the treatment is done through some chemotherapy drugs. These drugs are given through injections or orally. The drugs are given to the patient in a series with some gaps so the patient can recover from the last dose. When the surgery is done sometimes some of the cells are left in the body so chemotherapy is than done to kill them. It can also be done before the surgery to lessen the amount of cancerous cells present in the body.

SURGERY:

In the surgery the surgeon removes the lung cancer from the body however if the cancer has spread the doctors will recommend you to go through the radio or chemotherapy to shrink the cancer first so that the cancer can be removed easily through surgery.

IMMUNOTHERAPY:

In this therapy the immune systems is used to fight the cancer. The cancer cells produce proteins because of which they are able to hide from the body's immune cells. Immuno therapy is used to kills the cancerous cells when they start to grow in other parts of the body.

2. Take any disease of blood. Give blood tests and their results. What will be the management of the disease(treatment)

ANEMIA:

It is a condition in which the patients body does not have enough healthy blood cells in his body to provide or carry the oxygen to the tissues or organs of the body. A person with anemia feels tired and weak. Anemia is of many types, most of the time it occurs because or underlying serious diseases. It can be long or short term and mild or severe.

SYMPTOMS:

1. Fatigue
2. Chest pain
3. Dizziness
4. Weakness
5. Cold feet and hands

BLOOD TEST FOR ANEMIA:

CBC TEST (COMPLETE BLOOD COUNT) test detects whether the person has anemia or not. This test checks the hemoglobin and hematocrit level in the body. Hemoglobin is a protein with iron that carries the oxygen to the body.

CBC indices*	Control	IDA
Haemoglobin (g/dL)	13.93 (0.74)	10.8 (1.11)
Haematocrit (L/L)	41.1 (1.9)	32.96 (3.01)
MCV (fL)	86.54 (2.54)	74.85 (3.45)
MCH (pg)	29.79 (0.87)	24.27 (2.73)
MCHC (g/dL)	33.6 (0.97)	30.59 (2.46)
RBC (x 10 ¹² /L)	4.74 (0.24)	3.81 (0.26)
PLT (x 10 ⁹ /L)	232.8(48.87)	268.0(76.74)
WBC (x 10 ⁹ /L)	6.53 (1.19)	6.60 (2.19)
Neutrophils (%)	3.74 (1.01)	4.02 (1.76)
Monocytes (%)	0.30 (0.90)	0.28 (0.10)
Lymphocytes (%)	37.20 (8.50)	32.93 (8.63)

OTHER TESTS:

When a person is found anemic he is asked to go through some more tests in order to find the underlying cause of his anemia.

TREATMENT:

IRON DEFICIENCY ANEMIA:

Treatment of this anemia includes some iron supplements and a diet which has large amount of iron in it. If the cause of iron deficiency anemia is bleeding- other than menstruation, then the must must be located and stopped.

VITAMIN DEFICIENCY ANEMIA:

This type of anemia is treated by consuming more and more vitamins through your diet.

APLASTIC ANEMIA:

Its treatment requires blood transfusion to increase or boost the level of red blood cells. A bone marrow transplant may also be needed if the bone marrow can not produce healthy blood cells.

HEMOLYTIC ANEMIA:

To treat this type of anemia the patient should not take unnecessary medicines or drugs to treat infection because it weakens the immune systems.

Depending on the reason or cause of your hemolytic anemia go to the concerned doctor (heart or vascular specialist)

SICKLE CELL ANEMIA:

The treatment of the sickle cell anemia is done through pain relievers and oral and intravenous fluids. Blood transfusion may also be needed. Folic acid and supplements should be consumed

ANEMIA CAUSED BY BONE MARROW DISEASES:

This can be treated by medication or chemotherapy. Sometimes a bone marrow transplant is necessary.

THALLESSEMIA:

Thallemia is most of the time in mild form and treatment is needed but if it becomes severe then medications, blood transfusions or consumption of folic acid and supplements can help a lot. Removal of spleen, bone marrow stem or blood transplant can also be sometimes needed. .