A study on lung cancer.

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Abstract

Lung cancer has become major reason for cancer deaths in the world. It is 1st leading cause of death in men and second leading cause of deaths in women among remaining cancers. Since 1985 lung cancer has become one of the most common cancers around the world. There has been a large relative increase in the numbers of cases of lung cancer in developing countries. In this article we discuss about the symptoms, causes, risk factors, diagnosis, stages for lung cancer.

Introduction

The cells in everybody are meant to die at some point of their life to avoid overgrowing of the cell which is usually defined as Apoptosis. There are certain conditions that cell undergoes in which the cell escapes the process of apoptosis due the changes it has developed by the mutations in its genes. This leads to overgrowth of the cell those results in development of tumour and cancers. There are two types of lung cancers small cell and non-small cell which can be differentiated based on their morphology under the microscope [1].

Symptoms

25% of the people who got lung cancer usually do not show up any symptoms as the chest x-ray or CT scan shows small coin lesion that rarely report zero symptoms at the time of discovery of cancer. In other cases, tumour tissue may interfere with breathing, showing symptoms like cough, wheezing, pain in chest, wheezing and hemoptysis. If cancer metastasized to nearer nerves it may give shoulder pain [2].

Causes and risk factors

• Cigarette smoking

• Passive smoking

• Exposure to asbestos fibers

• Exposure to radon gas

• Prior history of lung cancer

• Lung diseases

• Exposure to diesel exhaust

• Air pollution [3]

Diagnosis

The diagnosis may include chest X-ray, one of the most common diagnostic steps that may display tumors tissue called as hamartomas on the X-ray. CT-scan can be performed on chest area and abdomen to check for metastasis. For the detection of precise and exact location of tumour we can opt for MRI scan. To know the metabolism and functions of the living tissue of the lungs we can go for PET scan (Positron emission tomography) that helps in giving the 3-D images in colored format [4].

Stages of lung cancer

There are 5 sages in the development of cancer in the body. At early stage that is stage zero the physicians may interfere with the abnormal growth of the cells at the superficial layers of the cell linings. At stage one the tumour grows to a size of 2-4 cm but the cancer cells do not have the ability to spread or metastasize. In stage two if the size of tumour tissue is less than 5 cm it may spread to lymph vessels and lymph nodes. If the tumour tissue is smaller than 7 cm then it can spread to nearby tissues but not to the lymph nodes. At stage three the cancer can spread to the surrounding areas of the lung. At stage four the cancerous cells have ability to spread to other vital organs like brain bones and heart [5].

Conclusion

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and an open-access and on-line journal, publishes cutting-edge papers from all areas of cancer-related science. This journal publishes each article immediately upon acceptance as a provisional portable document file (PDF) followed by a fully formatted PDF and web version. As a fully rapid peer-reviewed journal, Journal of Molecular oncology research publishes selected papers from among the articles submitted, due to stringent criteria our referees and editors impose on manuscripts. Acceptance of papers is based on the originality of the observation or investigation.

I thank all reviewers for their excellent contributions. At this stage we are calling for submissions of articles, commentaries, and letters to the editor for the upcoming issues. We glance forward to receiving your exciting contribution. Finally, I would like to thank you, the contributors and readers for your interest in the journal and I encourage you to continue to send us your valuable feedback and ideas for further improvement of our journal.

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