

# CANCER DISEASES IN LUNGS AFFECTED BY RADON EXPOSURE USING IMAGE MINING FOR NON-SMOKERS

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**Abstract** - Some diseases causes very fast with our environment. We don't know the name of the diseases also. Here we were approaching most of the diseases are caused by gases. Especially Radon (Rn). It is actually natural gas and also chemically inert. The main factor of cancer diseases are caused by various types, like Bladder cancer, Lung cancer(1) Brain cancer,. Breast cancer, Cervical cancer, Ovarian cancer, Throat cancer, stomach cancer etc., Most of the people were affected lung cancer whether smokers or non-smokers. That is why we proposed using image mining approaches and identifying how cure it .Image mining is the mixture of data mining and image processing. It is the knowledge based extraction of data. This research technique is used some parameters with Rn gas content and how it is affected non-smokers only. We approaches a method are used three parameters such as blood, tissues, size. Using these categorized in Radon affected by non-smokers.

**Keywords**-Radon, lung cancer, mining, smokers, blood, tisuses

## I. INTRODUCTION

Image mining is the combination of image processing and data mining. Image Mining is an extended branch of data mining that is concerned with the process of knowledge discovery concerning images. Image mining is primarily used to the requirements of finding the various applications in diverse fields such as retail, financial, communication, marketing organizations and medicine, For Improve the detection of disease in the medical field image mining techniques is widely used today. Because image mining is the branch of data mining like many field .For example medicine, marketing... Here taking particular image and nodule, how it spread like cancer and especially non-smokes (2).

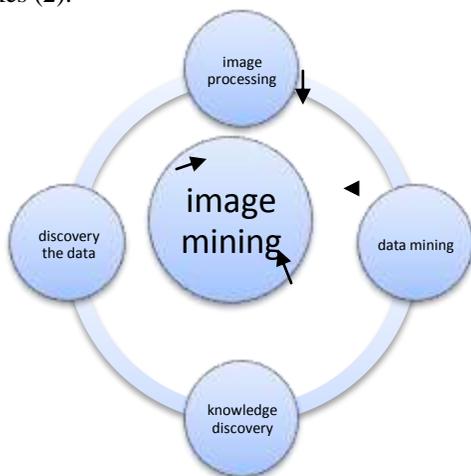


Fig.1 process of image mining

## Basics cancer

Start in this section to get answers to some of the basic questions about cancer, such as what it is, what some of the common signs and symptoms are, and how many people it affects.

## Radon

Rn-Radon gas is naturally inert. That is one of the inert gas. This gas is also called as natural gas. It is radius caused by radioactive gas. This gas is create problem to home.

## II. SOME SYMPTOMS FOR LUNG CANCER

From cough, chest pain, deep breathing, continuous laughing , infections...etc.,

The following chart shows that Rn – gas affected by our parameters with different age factors in cancer diseases.

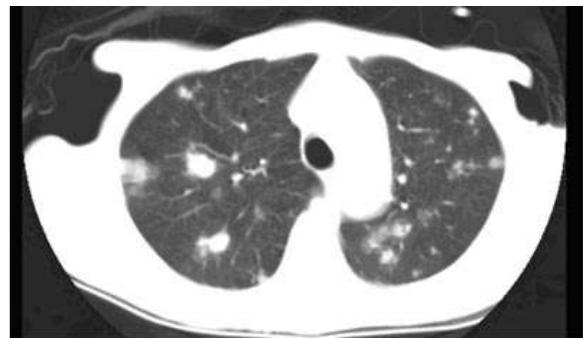


Fig.2 Nodule with lung

The above diagram shows that the morphological (3) image like nodule with lung.

Composite on different marking areas are symptoms of cancer –curing possibilities are there in initial stage

## Nodule

It is a round opacity, at least moderately well maginated and no greater than 3 cm in maximum diameter.

The following chart shows that in different parameter level and approximately affected by lung cancers spread for non-smokers.

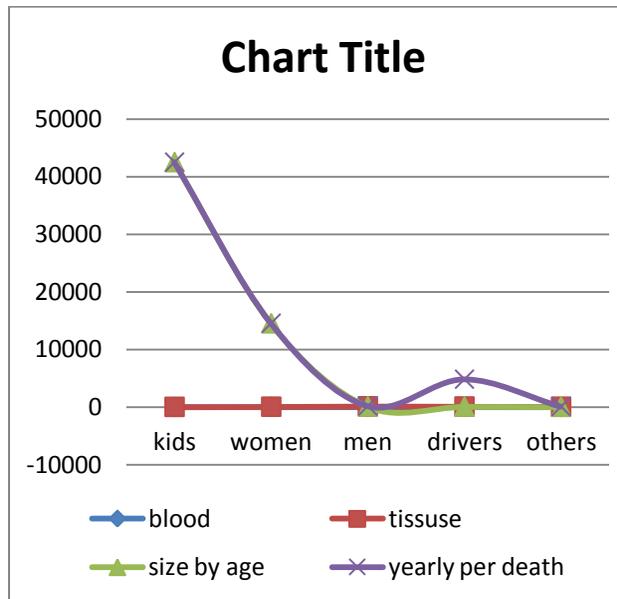


Fig3.chart for different parameter level

parameters	smokers	Non-smokers
<b>Blood</b>	40%	35%
<b>Tissue</b>	30%	25%
<b>Size</b>	20%	16%
<b>Others</b>	10%	24%

Fig4.comparison of smokers Vs non-smokers with parameters

### III. PROPERTIES

Radon is a colorless chemically-uncreative inert gas. The atomic radius is 1.34 angstroms and it is the heaviest known gas--radon is nine times denser than air. Because it is a single atom gas (unlike oxygen, O<sub>2</sub>, which is comprised of two atoms).

It must be considered when designing a radon control strategy: (1) there is a strong synergism between smoking and It must be considered when designing a radon control strategy: (1) there is a strong synergism between smoking and radon exposure such that smokers experience the vast majority of the radon-induced lung cancer burden; (2) the public is generally unaware of this increased risk, with smokers penetrates many common materials like paper, leather, low density plastic (like plastic bags, etc.) most paints, and building materials like gypsum board (sheetrock), concrete block, mortar, sheathing paper (tarpaper), wood paneling, and most insulations It is actually less likely to test and remediate; and (3) residential radon control efforts approach thresholds of cost-effectiveness only if those at higher risk (such as smokers) engage in testing and remediation.

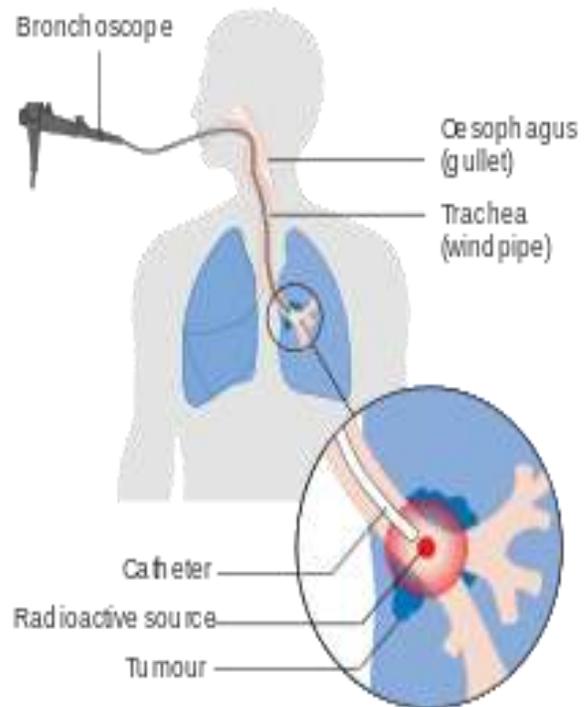


Fig.5 lung –nodule affected are

Furthermore, given past and projected downward trends in smoking prevalence among adults, the contribution of radon to the public health burden of lung cancer is decreasing This set of evidence leads us to an important policy assertion: reducing smoking in the population and moreover, in different medical classification (4) like cancer, blood, ... and everything can be considered and curing possibilities are available.

### IV. CONCLUSION

In image quality or accuracy the clear vision of nodules (the abnormal growth tissue) using any parameters. For example in blood like whether cell or non-cell, (6) find the group of blood and take caution immediately, then next size variation is depending upon the age factor for any human being. With the help of image mining we may analyze any type of cancer diseases in other parameters and get their image quality and clear vision, find easily.

### V. REFERENCES

1. Lung cancer in never smokers: Change of a mindset in the molecular era Y.J. Lee et al. / Lung Cancer 72 (2011) 9–15.
2. Lung Cancer in Non-smokers Adnan Yılmaz, MD1 ; Reha Baran, MD1 ; Birol Bayramgürler, MD1 ; Ergün Karahallı, MD1 ; Turkish Respiratory Journal, December 2000, Vol.1, No.2
3. A Segmented Morphological Approach to Detect Tumor in Lung Images 1Poonam Bhayan, 2Gagandeep Jindal 1,2Dept. of Computer Science and Engineering, Chandigarh Engineering College, Landran, Mohali, Punjab, India, ISSN : 2229-4333(Print) | ISSN : 0976-8491(Online)
4. Application of Data Mining Techniques for Medical Image Classification, 2005